# 

Continuous Progression on Prosperity Path



Ministry of Agriculture & Farmers Welfare Goverment of India



Shri Radha Mohan Singh Minister of Agriculture & Farmers Welfare



Shri Parshottam Rupala Minister of State for Agriculture & Farmers Welfare



**Smt. Krishna Raj** Minister of State for Agriculture & Farmers Welfare



Shri Gajendra Singh Shekhawat Minister of State for Agriculture & Farmers Welfare

# **Healthy Soil, Wealthy Farmer**



Agri Research

645 high yielding climate resilient crop varieties/hybrids of field crops released during last 3½ years.

Established **150 pulses seed hub** to produce quality pulse seeds.



Green Revolution 9.58% boost in foodgrains output

2015-16: 251.57 million tonnes yield 2016-17: 275.68 million tonnes yield



Agri Extension

Efforts for strengthening KVKs by increasing the staff from 16 to 22 per KVK.

27% increase in trained candidates in 2014-17

**18%** increase in agriventures

# iik

**Agri Education** 

Undergraduation in <u>Agriculture & allied</u> subjects declared as Professional degree.

> Remuneration for research associates increased from R12000 to R15000/month in first 2 years & R14000 to R17500/month in final year.

> > 5<sup>th</sup> Dean Committee Recommendations approved

White Revolution In comparison to 2011-14, growth in milk production during 2014-17 is

30.89%

**Blue Revolution** 

In comparison to 2011-14, growth in fisheries production during 2014-17 is **20.1%** 

> Target to produce 15 million metric tonnes by 2020-21



### Highest ever food grain production during 2016-17



Record food grain production in 2016-17 which is 7.27% higher than last 5 years average production and 9.59% more as compare to 2015-16

### More budget allocation to agriculture by Modi Government



### DEPARTMENT OF AGRICULTURE, COOPERATION & FARMERS WELFARE



### SOIL HEALTH CARD SCHEME (SHC)



- Soil Health Card was launched in February, 2015.
- The Second Cycle commenced from May 1st 2017.
- 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.
- 3.44 Crore samples have been collected.
- 11.22 Crore 'Soil Health Cards' have been distributed till 31 December 2017 to the farmers.



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

#### Amount Released under Soil Health Management Scheme



During 2014-17, Rs. 1315.87 crore release to state which is 47 times more as compared to Rs. 27.76 crore released during 2011-14.

**Soil Health Card Scheme** 



Before 2014 2014-17\* \*More than 10.5 Crore Soil Health Card released up to 30.01.2018



Soil Testing Labs (Static + Mobile + Mini-Labs) Sanctioned



In the year 2011-14 there was only 15 mini laboratory sanctioned which has increased upto 9105 during 2014-17.

#### **Amount Released under Soil Health Card Scheme**



Under Soil Health Card no amount was released during 2011-14. During 2014-17 (upto December) Rs. 361.4 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 10,000 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.



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



### PARAMPRAGAT KRISHI VIKAS YOJANA (PKVY)

#### Numbers of Clusters Formed under PKVY



Paramparagat Krishi Vikas Yojna is first big scheme of India. So far 10,000 Cluster have been approved.



#### Allocated amount under Pramparagat Krishi Vikas Yojna

Under Pramparagat Krishi Yojna during 2014-17 Rs. 947 Crores amount has allocated as copared to before year 2015.

### 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 2406 farmer cluster and 79 farmer producer organization has been formed.



#### Amount Released during 2014-17 under MOVCDNER

Substantial increase in the budget under MOVCDNER during the year 2014-17

### 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.
- 470 mandis of 14 states have been integrated with e-NAM so far.
- In principle approval given to integrate 579 mandis in 16 States with e-NAM.
- To facilitate assaying of commodities for trading on e-NAM, common tradable parameters have been developed for 90 commodities.
- By an amount of Rs. 146.93 core has been released by 31 December

2017, 69,40,116 farmers, 100496 Traders and 53011 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.



#### Uttam Fasal Uttam Enaam



#### **Progress under National Agriculture Market (e-NAM)**



#### **Business under National Agriculture Market (e-NAM)**

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### 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

**Venture Capital Scheme (VCA)** 

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 26 FPCs have taken benefit under the scheme.

### **Farmer Producer Organizations** (FPOs)



788 VCA projects set up during 2014-17 as against 610 during previous 3 years (2011-14), which has increase upto 29%.



484 FPOs have been registered during 2014-17 as compared to 223 FPOs during 2011-14 with total increase of 117.04% 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

11,00,486.55 MT Pulses and recorded highest gross Profit of Rs 114.17 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 Benifited from Procurement of NAFED**



14,14,111 numbers of farmers benefited from procurement between 2014-17 against 2,70,352 between 2011-14, which is 423.06% higher.

### **Increase in Business of NAFED**



Total Rs. 5190.13 crore business as increased in the year 2014-17 which is 41.67% more as compared to Rs. 3663.37 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 107.93% as compared to Kharif 2011-14. For non loanee coverage has increased by 262.33%.

### Rabi Season

Total farmer covered under loanee and non loanee during Rabi 2014-17 has increased 94.95% as compared to Rabi 2011-14. For non loanee coverage has increased by 287.14%.

### AGRICULTURAL CREDIT AND JOINT LIABILITY GROUP

### **Agricultural Credit**

#### **Ground Level Credit Flow (Short Term and Total Credit)**



There was 53% 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 25.42 lakh JLG formed and Rs. 27930 crore given.

2011-14 Year 2014-17 (upto December)

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### 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**

During the year 2014-17 (upto December) Rs. 5935.09 crore has been released which is 26.31% more as compared to year 2010-14 (Rs. 4698.65 crore).

\* Includes allocated amount of Rs. 2500 crore (BE) during 2017-18

#### **Micro-Irrigation**



#### Maximum area under micro irrigation

During 2014-17 area under micro irrigation has increased 43% as compared to year 2011-14.

\* During 2017-18, so far an area of 4.96 lakh ha has been 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 3114 Cold Storage projects with installed capacity of 136.84 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 3.50 Lakh MT cold storage capacity.
- Technology Development and Transfer for Promotion of Horticulture:

- NHB supported 694 projects/ events for Transfer of Technology which includes 20 projects during 2017-18
- NHB accredited 1628 nurseries for production of superior quality planting material.
- During 2016-17, in horticulture crops production was 300 million ton in 24.85 m.ha. which has increased upto 305.40 m. ton in the year 2017-18.
- During the year 2014-15 to 2017-18 financial assistance under MIDH has increased 88.90% as compare to year 2010-11 to 2013-14.



 NHB has accredited and rated 1628 nurseries across the countries to ensure availibility of high qualitynurseries to the farmers.

### **Record production in Horticulture crops**



The Country's horticulture production rose by 5.03% to touch an all time high of 300.6 million tonnes during 2016-17 on the back of record output of fruits, vegetables, spices and plantation crops.



**Business under horticulture scheme** 



**Cold storage scheme** 





### **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. 75 crore of Gol share has been released in 2017-18.

### **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 has completed. Plant & Machinery has installed.
- Park has completed and handed over to the state government.



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 16 Nucleus Coconut Seed Gardens, 114 small Coconut nurseries and 426 organic manure units.
- During the financial year 2016-17, India exported sizable quantity of coconut oil to Malasia, Indonesia and Sri Lanka. While during the previous year we were importing coconut oil from these countries.
- India is exporting desiccated coconut in large quantity to USA and European countries.
- Trained 2617 Neera Technicians since scheme started in 2014-15.
- 10186 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 in value terms was Rs. 2084 crores during 2016-17 against import of Rs. 271 crores.
- In the Foreign Trade Policy 2015-20 to promote export of coconut products provision is made to provide 2-7% of FOB (Free on Board) value as incentives.

#### Achievement Under Various Component of Coconut Development



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

#### Society, Federation and Coconut Producer Company Under CDB



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

### NATIONAL BEE BOARD (NBB)

### **BEE KEEPING**

• 7546 beekeepers/beekeeping & honey societies/firms/companies

etc. with 12.23 lakh colonies have been registered upto December 2017.



### Fund Released for Promotion of Bee Keeping

Budget for beekeeping has increased almost 172% in last years (2014-17) as compared to the period 2010-14.

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



28.56% 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 and made operational.
- Relaxation of transit regulations is pre-requisite for assistance under Sub- Mission on Agroforestry (SMAF).
- 21 States (2016-17 in 8 states and 2017-18 in 12 states) have relaxed this regulation; and all states is being motivated in this direction.



### Fund Realesed for Promotion of Agroforestry (Rs. Lakh)

Substantial amount has been released to the states for promotion of Agroforestry.

### NATIONAL FOOD SECURITY MISSION (NFSM)

## 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.
- 31,366 clusters front line demonstrations through 549 KVKs during 2017-18 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 140450 qtl. production of quality seeds from Kharif 2016.
- After taking above mention efforts the total production of pulses during 2016-17 was 16.35 million tonnes whereas in

2016-17 production has reached upto 22.95 million tonne which is 40.36% increased over the year 2015-16.

# National Mission on Oilseeds and Oil Palm (NMOOP)

### **Oil Seeds:**

- NMOOP aim to enhance the production and productivity of oilseeds and oil palm from an average production of 29.79 million tonnes and 1122kg/ha during 12th plan period to 36.10 million tonnes and 1290 kg/ha respectively by the end of 2019-20.
- 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



Substantial increase in the rates of Assistance under various components of Oil Palm.



### **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 67 PQ Stations at national level has been implemented through online message exchange system for according import clearance.

Plant Protection Pesticides

**Export Registration** 

- 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.
- Import of pesticides have been restricted through Chennai and Mumbai sea ports as well as Delhi and DCD Gurugram Airport.
- The process of pesticide registrations has been made completely online.



Increases of 110.49% in Plant Protection Pesticide Export Registration over 2011-14. Plant Protection Pesticides Registration



The number of Pesticide Registration has been increased by 290% on account of better monitoring and use of technology.

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### AGRICULTURAL MECHANIZATION



#### **Numbers of Machinery Distributed to Farmers**

An increase of 147% in number of machineries distributed to farmers under various schemes during 2014-17 as compared to the number of machinery distributed during 2010-14.



#### **Allocation of Funds**

Allocation of funds increased almost by 641% in 2014-17, under Agriculture Mechanization as compared to allocation of funds during 2010-14.

### SEED

### Initiatives and Achievements of the Seed Devision

- 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 was as under:
- The same maximum sale price of

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 **Multilateral** resources under Systems of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)

The same maximum sale pile of	
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.
Bt cotton seeds for Kharif 2017 was retained at par with Kharif 2016.	were examined and 3158 accessions of various crops were recommended for export to
	various countrios

In the last three years, 96,778 Seed Village Programmes were various countries.



### Initiatives and Achievements of the Seed Division

Due to effective implementation of Gol 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** 

53.55% increase in turnover of NSC during 2014-17 as compare to 2010-14 due to more sale of Seeds of Crops and Vegetables.



During the year 2016-17 corporation has contributed the profit of Rs. 12.03 crore to Indian Government.





Enhanced area of NSC under cultivation

During the year 2014-17 area under different crops cultivation has increased 337% as compared to year 2011-14.

### Comparative increased in storage capacity



During the year 2014-17 storage capacity has increased 182% as compared to year 2011-14 by which seed quantity increased and transportation expenditure decreased.



#### **Fish seed production**

### Comparison in production of antibiotic stress tolerant varieties of paddy



During the year 2014-17 antibiotic stress tolerant varieties has increased 273% as compared to year 2011-14.

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

### New initiative of Protection of Plant Varieties & Farmers Right for benefit of farmers

- PPV&FRA has received total 15,827 applications out of which 11,386 applications were during last 3 years which is 72% of total applications.
- Till now authority has released 3065 registered applications. During last 3 years, 2465 applications registered & released which is 80% of total registered applications.
- Since 2009 Authority has a provision to provide 35 plant genome saviour award of amount Rs. 35 lakhs for farmers & farming cummunities. Till now 124 award had conferred out of rich 73 was conferred during last 3 years.
- During last 10 years, 147 crops species have been notified for registration out of which during last 3 year, 64 crops notified which is 43% of total registered crops.



- The amount of cash reward for @ Plant Genome Saviour@ Farmer Award, has been enhanced from Rs. 1.00 lakh to Rs. 1.50 lakh each and the amount of Farmers' Recognition has been enhanced from Nil to Rs. 1.00 lakh each during 2015.
- The annual fee for the farmers after registration of varieties has been reduced from Rs. 2000 per year to Rs. 10 only during 2015. Renovation of registration fees for farmers has reduced Rs. 4500 to Nil.

### Notified crops varieties (147) which is to be notified (42)



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.



 Three New Branch Offices of PPV&FR Authority have been approved ecently 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.

 Till so far there was appeal against decision of authority in High Court but now appeal may be done in tribunnal created by authority.

### Achievements of application received and registered



#### Achievements of application received and registered of farmers crops



### 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, Agrometeorology & 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.



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



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District level inventory of Horticulture Crops

### 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



effected 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 2015-20 as compared to 2010-15.

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



Assistance of Fund under NDRF to states as increase 140.50% during 2014-17(Rs. 30101 crore) as compared to year 2010-14(Rs. 12516 crore)

### **AGRICULTURE TRADE**

### Steps Taken for increasing Agriculture Export

- Bulk export of groundnut oil, soyabean oil and maize (Corn) oil has been permitted w.e.f. 27.0.3.2017, removing consumer pack restriction of (upto 5 kg).
- Import duty on tur (pegeon pea) has been raised from 'zero' to 10% w.e.f. 28th March 2017, from 'zero' to 50% on peas w.e.f. 8th November 2017 and from zero to 30% on Checkpeas (Chana) & Lentin (Masoor) w.e.f. 21st Dec, 2017 respectively. Besides this, there is quantitative restriction on import of 2 lakh tones per annum on tur (pigeon pea) and 3 lakh tons per annum on urad & moong.
- Import duty on wheat has been raised from 10% to 20% w.e.f. 8.11.2017.

Export of all varieties of pulses including organic pulses has been made "free" without any quantitative restriction w.e.r. 22.11.2017.

- Import duty on soya bean has been raised from 30% to 45% w.e.f 17.11.2017
- Under Mid-term Review of the foreign Trade Policy 2015-20, rates of reward under Merchandise Exports from India (MEIS) have been enhanced on export of various agriculture items from 2% to 4%, 3% to 5% and 5% to 7% w.e.f. 1<sup>st</sup> November, 2017 to 30<sup>th</sup> June, 2018.
- Import duty on sugar has been raised from 40% to 50% w.e.f. 10<sup>th</sup> July, 2017.
- Import duty on palm oil and various edible oils has also been increased.



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

There has been substantial increase in export of Cotton, Fresh fruits, Fresh vegetables, Rice (non-Basmati), Rice (Basmati) in 2014-17 over 2011-14.
### 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; 203 training programmes were organised.
- 168 QPS developed by ASCI for skill training in agriculture and allied sector.
- During 2017-18, 116 skill training courses (200 hrs) are planned through 94 identified Institutes. Rs. 2 crore has been allocated from RKVY.
- One National Level Skill Development workshop in New Delhi and 4 regional skilled

development workshop at MANAGE, Kolkata, Jaipur and Chandigarh were organized to orient various stakeholders.





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 Horticulture Department Haryana on 20<sup>th</sup> September 2017 for Northern States in Chandigarh.

## 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.
- During 2014-15 to 2016-17 Maharashtra, Karnataka and Odisha have taken up 34 projects under Public Private Partnership for Integrated Development of Agriculture (PPPIAD).
- 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.

- Geo-tagging of assets created under RKVY has been initiated with technical support from National Remote Sensing Center. More than 75,000 assets geo- tagged.
- The central share of allocation for implementation of the scheme during the current year (2017-18) is Rs. 4750 crore.
- The cabinet on 1st November 2017 has approved continuation of the ongoing centrally sponsored scheme (State Plan)-Rashtriya Krishi Remuneration Approaches for Agricultural and Allied Sector Rejuvenation (RKVY-RAFTAAR) for 3 years (2017-20) Rs. 15722 crore.



#### **Project Taken by States Under RKVY in Various Sector**

Substantial increase in the projects under RKVY.

## SWACHHTA PAKHWADA



#### Ek Kadam Swachhta Ki Aur

- During year 2017, Swachhta Pakhwada from 16<sup>th</sup> to 31<sup>st</sup> May and "Swachhta Hi Sewa Abhiyan from 15<sup>th</sup> September to 2nd October have been observed in this Department. In which 321 Agriculture markets, 35 Central Integrated Pest management Centers and 357 Plant Protection Quarantine Stations were covered and cleaning drives were also undertaken in Premises as well as surrounding areas.
- All the Ministers and Officers led by Hon'ble A&FW Minister Sh. Radha Mohan Singh participated in the Abhiyan at various places across the country.

- During the "Swachhta Hi Sewa Abhiyan", National Centre of Organic Farming had participated in Pandit Deendayal Upadhyay Krishi Unnati Mela and demonstrated Waste Decomposer technique and Organic Farming to Farmers.
- Provisions are being made of Rs.
   5 lakh each mandi under e-NAM Scheme for setting up waste management plants.
- Rs. 689.94 lakhs has been released to states under subscheme of Rashtriya Krishi Vikas Yojajna (RKVY) for solid & Liquid Waste management.



## 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.
- The scheme aims to provide Al services at farmers door step for breed improvement of cow and buffaloes along with self-sustaining MATRIS and facilitating smooth transport and distribution of Liquidity Nitrogen gas.
- 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

**Milk Production** 

been released.

- First time in the country for development and conservation of indigenous breeds 14 gokul grams approved.
- In June 2017, the Gopal Ratan and Kamdhenu Awards were launched and 10 farmers and 12 institutions were honoured with Gopal Ratan and Kamdhenu Awards.
- 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.



In comparison to 2011-14, growth in milk production during 2014-17 is 16.9 percent.

Increase in average price paid to farmers



The earnings of dairy farmers registered an average increase of 13.79 percent during last three years.

#### DAIRY PROCESSING AND INFRASTRUCTURE DEVELOPMENT FUND

• With the aim of doubling farmers income and to take forward the gains made during "Operation Flood", Dairy Processing and Infrastructure Development Fund has been launched during the year 2017-18 with a corpus of Rs. 10,881 crore. The fund envisages that concessional credit with be made available to cooperative societies, dairy federations at interest rate of 6.5% through NABARD and interest subsidy would be borne by Government of India.

 Under the scheme, 95 dairy farmers will be benefited by sale of milk, 28,000 BMC would be set up in 50,000 villages, 126 lakh litre per

### NATIONAL BOVINE PRODUCTIVITY MISSION

day processing capacity would be renovated and 140 lakh litre additional chilling capacity will be created. Value added products of 59.78 lakh litre milk per day capacity will be created which will ensure remunerative prices to dairy farmers.

In order to enhance milk production productivity and to make and 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:

- Pashudhun Sanjivni: an animal wellness programme encompassing:

   animal health cards (Nakul Swasthya Patra);
   Unique Identification number and iii) national data base.
- 2. Advanced Breeding Technology: including assisted reproductive technique improving availability of disease free female bovines.
- 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 rapids 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. The information regarding 6.6 crore semen doses, 372 embroyos and 79,543 live animals has been uploaded on the website.

 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.



### 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
 Per capita availability has production is 5%.
 increased to 66 eggs per annum.



During the year 2011-14, Average Egg production was 210.93 billion which icreased to 277.50 billion during 2014-17 which is

an increase of 31.56 percent.

## LIVESTOCK HEALTH

Based on effective implementation established of FMD control programme, with vaccination three zones have also been
 Reducation in Foot and Mouth Disease Outbreaks

established as FMD free zones with vaccination.

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been drastically reduced to 505 only during the period 2014-2016. It is decreased by 74.19 percent.

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



### VETERINARY EDUCATION

#### Increase in Veterinary Colleges



During the period of 2011-14 total number of Veterinary Colleges in the first schedule was 36. During 2014 to 2017 the total number of veterinary colleges has been increased to 45 which is an increase of 25 percent.

- 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

#### Increase in seats of Veterinary Colleges



In order to meet the shortage of trained veterinary manpower, intake of students in various Veterinary Colleges was enhanced from 60 to 100 seats. Total number of seats has been increased to 1,334 from 914 in 17 Veterinary Colleges which is an increase of 45.95 percent.

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**



which increased to 327.74 lakh tonnes during 2014-17 which is an increase of 20.1 percent.

#### **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.







 Annual Insurance premium for fisher folk brought down to Rs. 20.34 from Rs. 29.00. been brought down to Rs. 12/-

- Insurance cover increased to Rs. 2.00 lakh from Rs. 1.00 lakh for accidental death and permanent disability.
- This has been integrated with Pradhan Mantri Suraksha Bima Yojna and the annual premium has



Fisheries Infrastructure Development

For deep sea vessel construction, an amount of Rs. 200 crore has been released to State of Tamil Nadu and total 5071 SIPs have been issued online.

## **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 and total 5071 SIPs have been issued on line.

- 18 new additional entry points have notified for export/import of live 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 AND EDUCATION INDIAN COUNCIL OF AGRICULTURAL RESEARCH



During 69th Republic Day of the Country the tableau of Indian Council of Agricultural Research on display at Rajpath for the first time







His Excellency the President of India, the Vice President of India and Hon'ble Agriculture and Farmers Welfare Minister Govt. of India honouring the artists and the officials of ICAR

## AGRICULTURAL EDUCATION

#### Increasing budgetary provision for better Agricultural Education



#### **Revision of PG Curriculum by Fifth Deans Committee**

#### New Programmes Introduced

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

## Degrees in Agriculture and Allied sciences granted Professional status

#### 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** 



Release of Fifth Deans Committee Report on 29th June 2016



New Experiential Learning units established in Agricultural Universities



The new experiential learning units besides providing training to the farmers also teach them the real time experience to increase their income. National talent scholarship for UG programmes doubled



Scholarship amount increased from Rs. 1000 per month to Rs. 2000 per month (1351 beneficiaries).





## New Research and Educational Institutions Opened

- Indian Agriculture Research Institute (IARI) has been established at Barhi, Jharkhand on the lines of IARI, PUSA, New Delhi
- Foundation stone for establishment of another IARI laid by Hon'ble Prime Minister of India on 26th May, 2017 in Assam
- Rajendra Agricultural University has been upgraded to Dr.Rajendra Prasad Central Agricultural University
- Six new colleges started under Central Agricultural University, Imphal and 2 new colleges opened under Rani Laxmibai CAU, Jhansi
- National Research Centre for Integrated Farming established in Motihari (Bihar)
- National Organic Farming Research Institute established in Tadong (Sikkim).

## Financial Support to New Universities

Funds worth Rs. 135 Crores each released to ANGRAU, Andhra Pradesh & SKLTSHU, Telangana.



## Financial support extended for establishing new Universities

- Agricultural University (ANGRAU), Andhra Pradesh
- Horticultural University (SKLTSHU), Telangana
- Horticultural University, Haryana



#### **Student READY**

- Launched by Hon'ble Prime
   Minister on 25 July 2015
- Enhancement of Fellowship from Rs 1,000 to Rs 3,000 p.m. for all the students for a period of 6 months during Student READY

#### **Components of Student READY**

- Experiential Learning (EL)
- Rural Agriculture Work Experience (RAWE)
- In Plant Training/ Industrial Attachment
- Hands-on Training (HOT) / Skill Development Training
- Student Project

#### Netaji Subhas – ICAR International Fellowships

- To develop competent human resources, supported training of Indian students in the identified best laboratories of the world (105 students benefitted)
- 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 (28 overseas students benefitted)



#### Thirty fellowships per annum

- US \$2000 pm for Indian candidates going abroad and Rs 40,000 pm for overseas scholars coming to India are being awarded by ICAR.
- Both the fresh and the serving persons in ICAR and AUs are eligible.



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

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

#### **National Agricultural Education Day**

3<sup>rd</sup> December was declared as the National Agricultural Education Day in memory of first President and first Food and Agriculture Minister of the Country, 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 2020-21)
- EFC circulated among the concerned departments

## Introducing Agricultural Courses (Syllabus) at School level:

- In order to attract young talent in agriculture DARE/ICAR has developed a syllabus for introduction at higher secondary level in schools.
- Following the recommendation of the Cabinet to this effect in 2015, DARE/ICAR is continuously raising the issue of introduction of agriculture in curricula at school level with the HRD ministry.

Name of Award (Numbers)	Year of Institution	Value of the Award
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/-
<ol> <li>Pandit Deendayal Antyodaya Krishi Puruskar (1 National &amp; 11 Zonal Awards)</li> </ol>	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

#### Establishment of Krishi Vigyan Kendras for Farmers



#### Technology Demonstration on Pulses by KVKs





#### Technology Demonstration on oilseeds by KVKs



#### 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 and involving 45000 farmers





#### Mera Gaon Mera Gaurav

- Group of 4 Agricultural Scientists (Multi-disciplinary) 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.
- Develop convergence with different departments and organizations for the development of villages
- 25000 villages are to be covered



#### Attracting and Retaining Youth in Agriculture (ARYA)



- Attract and empower the youth in rural areas for various agriculture, allied and service sector enterprises
- Emphasis on processing, value addition, marketing and networking
- Entrepreneurship development and value chain management
- 200-300 youth per district are involved through 25 KVKs in 25 States



#### Krishi Unnati Mela

Krishi Unnati Mela was organized twice in 2016 & 2017 during which the various Agro Industries from all over the country participated. More than 5 lakh farmers attended and got benefitted 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, saplings and seedlings of HYV's of crops 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



Extending training and technology support to the farmers for Quality seed, planting material and animal germ plasm.





Participation in the Extension activities

540.04 lakh





Quality seeds produced by KVKs	184600 tonnes
Plantation material produced by KVKs	1711.91 lakhs



Mobile Agro Advisory provided to the farmers 1022.67 lakhs

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## AGRICULTURAL RESEARCH

#### Details of the crop varieties released during the last 6 years.



Crop Group	April 2011- March 2014	April 2014- Dec 2017
Food Grains	184	353
Pulses	43	89
Oilseeds	47	97
Others	39	106
Total	313	645

#### Details of abiotic stress tolerant/ climate resilient crop varieties released

Crop Group	April 2011- March 2014	April 2014- Dec 2017
Food Grains	69	156
Pulses	38	90
Oilseeds	33	90
Others	21	45
Total	161	381



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**Breeders Seed Production** 



The details of the Indent received and production of Breeders seed by ICAR/NARS during 2011-12 till 2016-17 (Kharif season only)



Increase in the production of Breeders seed for the states





#### National; Phenomics Facility at Indian Agricultural Research Institute, Pusa (New Delhi)

Honourable Prime Minister dedicated the Nanaji Deshmukh National Phenomics Facility to the Nation. This facility besides promoting state of the art research in Agriculture including crop sciences, will prove a boon to overcome the adverse effects of the changing climate on various agricultural crops



## **BIO FORTIFIED VARIETIES A POTENT SOLUTION FOR FIGHTING MALNUTRITION**

Paddy: CR Dhan 310: Protein 10.3 percent

Paddy: DRR Dhan 45: Zinc 22.6 ppm

Wheat: WB 02 High Zinc (42.0 ppm) & Iron (40.0 ppm)

Wheat: HPBW 01 Iron (40.0 ppm) and Zinc (40.6 ppm)

Maize: Pusa Vivek QPM 9 Unnat: Pro-Vitamin A (8.15 ppm), Lysine (2.67%) & Tryptophan (0.74%)

Maize: Pusa HM 4 Unnat: Tryptophan 0.91% and Lysine 3.62 %

Maize: Pusa HM 8 Unnat: Tryptophan (1.06 %) and Lysine (4.18 %)

Maize: Pusa HM 9 Unnat: Tryptophan 0.68% and Lysine 2.97%.

Bajra: HHB 299: Iron (73.0 ppm) and Zinc (41.0 ppm)

Bajra: AHB 1200: Iron (73.0 ppm)

Masoor: Pusa Ageti Masoor: Iron (65.0 ppm)

Mustard: Pusa Double Zero Sarson 31: Erucic acid <2.0 percent and Glucosinolate <3.0 ppm

Cauliflower: Pusa Beta Kesari 1: Beta Carotene 8.0 - 10.0 ppm

Sugarbeet: Bhu Sona: High Beta Carotene (14.0 mg/100g)

Sugarbeet: Bhu Krishna: Anthocyanin (90.0 mg/100g)

Pomegranate: Solapur Lal: High Iron (5.6- 6.1mg/100g), Zinc (0.64-0.69 mg/100g) and Vitamin C (19.4-19.8 mg/100g)

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#### Integrated Farming System Models for Doubling Farm Income

- Agricultural crops, horticultural crops, dairy, fisheries, vermicompost, mushroom, for boundary plantation.
- 45 IAF models developed for various agro- ecological zones of the country.
- IFS models for better profitability, higher employment generation and reduced risks.
- Even in years of adverse weather conditions, IFS



models have managed to provide higher net income.

- Integrated schemes are required for promotion of multiple entreprise based IFS models.
  - Net profit (3 years' average income) during 2014-15 was Rs. 2.5 lakh.
- Reuse: 34% of the total entries except labour.
- Monetary value of additional employment generated Rs. 88,000.



#### **District Contingency Plans**

Contingency plans were developed for 623 districts: Horticulture, Animal Husbandry, Poultry farming, Fisheries along with technological options in different areas of agriculture to better address climatic aberrations and resultant adversities.



## Established new prototype of advanced agriculture machinery, agriculture processing centres and food testing laboratory





#### **Developed vaccines**

No. of vaccines developed



- Jones Disease
- Peste des petits ruminants (PPR)
- Goat Pox
- Equiherpabort
- Classical swine fever

#### **Developed diagnostic kits**

Number of diagnostic kits developed



Elisa kit- Theileria equi Elisa kit - Japanese encephalitis Lateral flow assay - Brucellosis Lateral flow assay - Tripanosomiasis Paper strip assay - Pesticide Residue in milk



ICAR-NIVEDI conferred DBT-Biotech Produce Award for development of Elisa Kit against Brucellosis











#### Open sea cage fish farming

- Sea- cage promotion technology demonstration of Cobia (Rachycentron canadum) and Silver Pompano (Trachinotus blochii)
- Average production of 3.0 tonnes in six months was demonstrated (6m width x 6m depth): 25-30 kg/ m<sup>3</sup>.
- Cost of production of Cobia and Pompano is Rs. 180/ kg. Price at Farm gate is Rs. 350/kg (Cobia) and Rs. 300/Kg (Silver Pompano).
- With the technological help of ICAR- CMFRI a total of 1058 cages were established along the coastal regions of India.







**Demonstration of Sea Cages** 

## AGRICULTURE TECHNOLOGY DEVELOPMENT

#### Remarkable new crop varieties and technology





- Developed high yielding varieties of Paddy with tolerance against drought (1), Blast (3) and Bacterial blight (5) resistant varieties employing Marker Assisted Selection.
- Paddy variety (CR Dhan 310) having high protein content (10.3) developed.
- Paddy variety (DRR Dhan 45) having high zinc content (22 ppm) developed.
- Two wheat varieties having high zinc content (42.0 ppm and 42.6 ppm respectively) developed.



- Dual purpose wheat (grain and fodder) varieties (BL Wheat 829) developed.
- Mustard variety Pusa Sarson 30 with low erucic acid content (<2%) developed.</li>
- 8 Bt Cotton varieties were identified by ICAR and approved for commercialization.
- Central Institute of Cotton Research, Nagpur has developed one variety of Bt Cotton -6; "CICR-RS 2013 Bt sale", that has given a yield of 3046 kg per hectare.





Solar PV Sprayers for spraying Agro-Chemicals under Solar Farming System developed

#### Agri- Voltaic System/ Solar Farming

#### **Agri- Voltaic System**

Crop cultivation together with electricity generation through Photo Voltaic (PV) module on a single piece of land.



#### Model Area: 1 hectare

- Solar PV generation efficiency : 0.5
   Mega Watt
- Daily electricity generation : 2500
   Kilo Watt per hour
- Investment : Rs 2.5 Crore
- Income generated through electricity : Approximately Rs. 45 lakhs annually.
- Age of system : 25 years
- Payback period : 7 years.
- Green gram productivity : 4.0 q/ ha

Ridge furrow seed drill for In-situ moisture conservation under Solar Farming System




# New improved breeds of Poultry and Swine developed

 Four new breeds of poultry (Kaamroop, Narmadanidhi, Jharsim and Himsamriddhi) developed.

# New generation fishing vessel developed.

Multipurpose fishing vessels for travelling, gillnetting and longlining.

New hybrid breeds (8) Rani, Asha, HD- K 75, Jarsuk, Manuki Safed, Lumsiyang Taanuvas, Ketim Gold (Hybrid), AVVU-T hybrid of pigs were developed





New generation fuel -efficient and multipurpose fishing vessel developed and made functional.

## FOURTH ASEAN – INDIA MINISTERIAL LEVEL MEET ON AGRICULTURE AND FORESTRY



Fourth ASEAN-India Ministerial level meet on Agriculture and Forestry was held on 12 January, 2018 at New Delhi, India in which the ways and means for taking continued efforts for future initiatives in the areas of agriculture and forestry were discussed. The meeting was co-chaired by, Hon'ble Agriculture and Cooperative Minister of Thailand Mr. Grisada Bunrech and Hon'ble Union Minister of Agriculture and Farmers Welfare, Govt. of India, Shri Radha Mohan Singh.

The meeting highlighted the need for taking fresh initiatives towards further strengthening the collaboration in the area of agriculture and forestry between ASEAN and India and deliberated on developing a strong roadmap in this regard.

The agenda was accepted and the report and recommendations of the ASEAN working group and Co-Chairs on Agriculture and Forestry were accepted. In this meeting the progress on medium -term plan of ASEAN-India cooperation in agriculture and forestry (2011-15) were noted. It was agreed that by increasing ASEAN-India collaboration, the solution for various problems confronting agriculture and forestry, especially the challenges of food security and climate change, that have become international issues, can be resolved by means of collaborative efforts in capacity building, agricultural education, research and development.



### New ICT (Information and Communication Technology) Apps and Portals Web Portal – Krishi Vigyan Kendra Knowledge Network

- PUSA KRISHI- Technology Mobile
  App
- Mobile App "riceXpert"
- e-Kapas Network and Technology
  Documentation
- Pulse Expert for diseases and pests
- e-Pest Survillance and Advisory System for horticultural crops
- Online Pest Monitoring and Advisory Service
- Pest Forewarning application
- KRISHI-Digital data portal
- Many other mobile Apps



जयकिसान जयविज्ञान





## ACTIVITIES CARRIED OUT BY THE DEPART-MENT OF AGRICULTURE, COOPERATION AND FARMERS WELFARE FOR MAKING THE LIFE OF COMMON MAN COMFORTABLE

Whatever sustained efforts have been made for the betterment of agriculture and farmers during the last three years under the auspices of Hon'ble Prime Minister Narinder Modi, the encouraging and positive results of them have been begun to reflected. Due to this the farmers are witnessing a multiple improvement in their lives. The Modi Government has laid down exclusive parameters with innovative modus operandi and transparent approaches. The Government has transformed the targets related to implementation of the schemes for the farmers welfare into mission mode in the time bound manner under able guidance of honourable Prime Minister, Our Government has laid down the foundation of modern and future oriented India with the new dimension, good governance, innovations and reformist approach. Modi Government has been

successful for creating awareness among the farmers towards the new initiatives taken for the progress of agriculture sector in the country. Modi Government has made sustained and reinforced endeavors for transforming the lives of rural inhabitants in a positive way.

During the tenure of UPA Government most of the budgetary provisions have been lesser against the expenditure incurred. For instance during the year 2011-12, the budgetary provision was 24,526 crore whereas the expenditure was only 23,290 crores. Similarly the budgetary provision during 2012-13 was 28,284 crore rupees, whereas the expenditure incurred was only 24,630 crore. During the year 2013-14 the budgetary provision was 30,224 crore, whereas the expenditure incurred was 25,896 crores.

Keeping in view the interest of the

agricultural sector and the farmers, Modi government has made higher budgetary allocation. For example, during the five years of the UPA government a budgetary provision of Rs. 1,21,082 crore was made for agriculture sector for the year 2009-2014 while the current government has allocated Rs. 2,11,694 crore to the agriculture sector during the period 2014-19 which is 74.5 percent more.

In addition to the budgetary provision, two corpus funds of Rs. 5,000 crore for micro irrigation funds and Rs. 10,881 crore for the Dairy Processing and Infrastructure Fund (DIDF) have been created for the years 2017-20.

Apart from this. the Fisherv & Aquaculture Infrastructure Fund Animal Development and Husbandry Infrastructure Development Fund amounting to Rs. 10,000 crore and an agriculture market development fund amounting to Rs. 2000 crore have been announced in the budget 2018-19.

The Government has imparted the sense of security and trust on the farmers during the span of deficient monsoon in the initial 2 years of the last 3 years period. The Government has put emphasis specifically on agricultural education, research and extension along with promoting the activities related to the distribution of soil health card, extension of the facilities for irrigation, low cost organic farming, national agricultural market, horticulture development, agro forestry, bee keeping, dairy, fisheries as well as egg production.

The Government has invested more capital for the strengthen of cooperatives. A number of initiatives have been launched for enhancing the production of pulses and oil seeds for achieving the target of self dependence in this direction. The farmers have been imparted unprecedented security coverage by dint of Pradhan Mantri Fasal Bima Yojana with the incorporation of different sort of risks and the lowest rate of premium. The contingency plan has been formulated for all the districts in the country. The Government has given priority to the interest of the farmers in the perspective of the economy by enhancing relief parameters to the effected farmers through drought and excess rainfall. It has been decided under the leadership of Prime Minister that the MSP will be announced on the basis of one and a half times the cost of different agricultural genes from the forthcoming kharif and the declared MSP will be available to all farmers, for this, a new system will be built by the Commission in connivance with the Center and the State. There has been a clear disclosure of the commitment to empowerment of the village, poor and farmers of the Modi Government in the 2018-19 budget.

The Hon'ble Prime Minister Mr. Narendra Modi has put up a target before the nation for improving the economic condition of the farmers. This target is to make the farmers income as double by the year 2022. This is for the first time that any Prime Minister of India has placed any target before the countryman for overall welfare of the farmers under the learned and able guidance of the honorable Prime Minister. The Ministry is supposed to complete this business by the year 2022. The Ministry of Agriculture has been engaged for interpreting the vision of the Prime Minister into reality with tooth and nail.

The Central government is working expeditiously to achieve the goal of doubling the income of farmers by the year 2022. For this purpose, the Government has constituted a committee under Chief Executive Officer. National Rainforest Area Authority, Agriculture Cooperative and Farmers Welfare Department to examine the issues related to doubling the income of the farmers by 2022 and to make recommendations to achieve this by 2022. The Committee was formed on 13.04.2016. Apart from working on a comprehensive strategy, the committee has been suggesting various interventions for parallel consideration which are being implemented by the Ministry through the State Governments.

#### **Input Management**

- The improvement of irrigation system is very much imperative for enhancing agricultural production, therefore our Government has increased the budget for irrigation.
- Our objective is more crop for every drop. Pradhan Mantri Krishi Sichai Yojana has been launched for getting rid for the problems related to drought. The aim of this scheme is to provide water to every

field. During 2017-20 a carpus fund of Rs. 5,000 crore has been announced for micro irrigation.

- The business related to middle and major irrigation schemes lying pending for years is being carried out by leaps and bounds.
- The water shed development task is also being implemented expeditiously along with water harvesting and water management.
- The ponds are being constructed in the field of the farmers under MANREGA.
- The solar energy driven pumps are being provided to the farmers on subsidized rates.
- The Government has initiated soil health cards for the first time in the country for providing information to the farmers about the fertility of their land. By dint of soil health cards the farmers are utilizing the fertilizers in a balanced quantity resulting in low cost in the farming and more production thereof.
- The availability of neem coated urea has asscertained the adequate availability of urea. This also has led the annihilated misuse of the urea in chemical industries.
- Government is promoting organic farming. The use of new technologies in agriculture sector like forecast for productivity through National Space Technology Programme, prior surmise about drought, better use of Rabi season for the vacant area of peddy etc are the factors conducive for the enhancement in production.

Apart from this the farmers are being provided information and advisories in time through call centers and farmers facilitation apps like telecommunication and online sources.

- Under agriculture loan interest subvention scheme, the Government of India provides loan on 5%n interest. The farmers have to pay 4% interest only. Madhya Pradesh, Chhattisgarh, Harvana, karnataka, Telangana, Andhra Pradesh. Tamil Nadu. Rajasthan and Puniab Kerala. provide additional assistance from the state treasuries. The farmers obtain interest free loan in these states.
- The computerization process is on for bringing about transparency in 63,000 packs working in the areas of cooperatives with the allocated fund of rupees 1,985 crore rupees during the forthcoming 3 years.
- The Modi government has accelerated the agricultural credit flow. During 2018-19, budgetary provision of Rs. 11 lakh crore has been made which was Rs. 10 lakh crore during last year. The amount of interest subsidy which was Rs 6,000 crore in the year 2013-14 which has been increased more than 15,000 crore during in the year 2017-18.
- FPO: It is a farmers related production organization which carries out the business of production collection, organic products along with providing

services to the farmers . It also works for promoting its business. During the year 2011-14, 484 FPO had been registered against 223 farmers production organizations in a year 2011-14, which is an increase of 117%. In the last 4 years, 3800 Farmer Productive Organizations were set up by NABARD, State Governments and Multilateral Agencies besides the Small Farmer Agriculture Business Association.

 JLGs: A sum of rupees 6630 crore was released to 6.72 lacs JLGs in a span of 7 years i.e. during 2007 to 2014, whereas a sum of Rs. 27,930 crore released to 29.33 lac JLGs in a span of 3 <sup>1</sup>/<sub>2</sub> years i.e. 2014-18 (January).

#### **Output Management**

- Union Government is laving emphasis for the improvement of agricultural marketing. Along with 3 prominent reformatory initiatives the E-national agriculture market has been initiated under which 498 Markets have been linked with E-national agricultural markets thereof by now. Online agriculture market trading has also been launched in a number of markets.
- A model PMC act 2017 has been circulated to all the states for improving marketing system in agriculture sector by the Government, under which there is a provision of market yard in the private sector.

During 2018-19 an amount of Rs

2000 crore has been announced for Agri-Market Development Fund which reflects the importance of the Retail Market in Agricultural Marketing. These markets have named GRAM been (Gramin Retail Agricultural Market). It will be possible to develop the infrastructure of 22,000 rural hatta and 585 APMC wings.

- Tomatoes, Onions, Potatoes are consumed throughout the year in the entire country. During the last 70 years, farmers and consumers have incurred loses. For the first time, a new initiative titled "Operation Green" has been taken so that farmers can get right price and products are also available to the consumers at suitable prices. For this purpose, a provision of Rs. 500 crore has been made.
- In addition to this, the Government is working for formulating a model act for promoting contractual agriculture.
- A declaration of Model Land Licence Cultivator Act has also been made in this budget through which farmers doing farming on rent and sharing basis will also get the benefit of institutional loan arrangements. For this, NITI AYOG will take necessary action with the help of state governments.
- The Government declared an appropriate and beneficial price related parameter for sugarcane and the minimum support along with 22 prominent crops like wheat and peddy etc. based on the

recommendations of agriculture cost and price commission (CACP), concepts and thoughts of union Ministries, State Government and other factors concerned. Keeping in view the proposals from the State Governments the provision has been made for the procurement of the products from the farmers on minimum support price.

- The procurement of pulses and oilseeds is carried out with price stabilization fund on minimum support price after having obtained the proposal from the states. During 2016-17, bumper production of pulses has been Maharashtra, Gujrat, witnessed. Madhya )Pradesh. Karnataka. Orissa. Andhra Pradesh, Telangana, Rajasthan, Harvana and Tamil Nadu etc. have sent a proposal for the procurement of arhar so as to provide support price to the farmers. The support price of arhar is rupees 5050. 20.6 lac tone pulses have been procured and farmers have enjoyed better return of their products.
- The MSP will be announced on the basis of one-and-a-half times the cost of various agricultural genes from the forthcoming kharif and the announced MSP will be provided to all the farmers, for this, a new system will be created by the NITI Ayog in collaboration with the Central and State Governments.
  - There has been a provision for the procurement of oilseeds, pulses

and cotton on minimum support If the minimum support price. price of agricultural products in the market comes down then based on the proposal of the Government 25% quantity of total production was procured through the states which limit has now been increased to 40%. The basic objective of this scheme is to provide beneficial price to the farmers for their products and to enhance the production along with the target also has been laid down for providing better returns to the farmers. Under this scheme a total procurement of 804923 MT costing to rupees 3372.54 in 2011-14 has been made, whereas during 2014 to 27th January, 2018 only a procurement of 26,75,639 MT of Rs. 12132.26 crore has been carried out.

Under Market intervention Under Market intervention scheme the agricultural products which do not attribute to support price and if such sort of agricultural products are more than 10% and there is a down fall of 10% in market price then state Government proposes and under this scheme the farmers began to enjoy market price on account of the 10% procurement by the states. Recently Government has increased this limit to 20%. Procurement approval in Karnataka beatel leaf, in Tamil Nadu palm oil, ginger in Arunachal Pradesh, Chilli in Andhra Pradesh and Telangana, Onion Madhya Pradesh, in

Karnataka and Telangana, grapes in Mizoram and apples in Himachal Pradesh have been granted.

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- Government is promoting quality in agricultural products through food processing. Pradhan Mantri Kisan Sampada Yojana has been launched with the allocation of Rs. 6000 crores. Apart from this, food processing potentialities will be developed by the performance on forward and backward linkage of agro processing clusters under this scheme. For this, the budget has been increased to Rs. 1400 crore in comparison to the last year budget of Rs. 715 crore.

#### **Coverage for the Risk**

 Union government has started Pradhan Mantri Fasal Bima Yojana. This is a security coverage for the farmers. The lowest premium rates have been laid down since ever for Kharif and Rabi crops which is maximum 2% and 1.5% respectively. In it the risk related to pre sown period and harvesting period has been included along with standing crop. The loan sanction has been made equal to financial parameters by removing capping. Not only so even 25% payment is being made instantly online system for the claims of losses. For the expeditious payment of the claims and crop loans to the farmers, the new techniques like drone and smart phone for harvesting has been utilized in a number of states.

- The provision has been made for depositing premium amount through new technical facilities like service centre and online since this kharif season while keeping in view the facilitation to the non-loanee farmers.
- The government has made a number of changes for providing relief resulting in the loss due to natural calamities. Now the government is providing relief on 33% loses. Apart from this amount of relief has been multiplied as 1.5 times more.

#### Role of State Government in Pradhan Mantri Fasal Bima Yojana

- Selection of crops and areas for inclusion in the scheme.
- Selection of crop-wise insurance unit, declaring the sum insured and the determination of crop-wise indemnity level.
- Making cluster of districts and issue of tender notice, selection and notification of the implementing agency / insurance company.
- Issuing necessary guidelines for all the agencies / institutions

/ government departments / committees engaged in the implementation of the scheme.

- To provide yield data for insurance claim calculation and to conduct requisite number of Crop Cutting Experiments (CCEs).
- To release 50% share of the premium subsidy to insurance companies at the beginning of each season based on the reasonable estimates and release of balance immediately after the final data is presented by the insurance company.
- To help the insurance companies to evaluate the crop losses of individual insured farmers in case of localized risks and also help in the assessment of subsequent loss assessment.

#### **Auxiliary Activities**

#### 1. Horticulture

 The consolidated Horticulture Development Mission is playing an important role for making the farmers income as double. For this purpose, better plantation material, improved seeds and protected cultivation and high density plantation, rejuvenation, precision and farming like measures have been taken.

While utilizing Jio informatics (chaman), the horticulture assessment and management related coordinated programme has been launched with the estimated cost of Rs. 13.38 crore in Sept., 2014 which is to be completed by 2018. The aim of this programme is to develop and strengthen the methodology for forecasting the potential production in the area to be used for agricultural crops while utilizing tele sensitive technology and sample survey methodology.

- A forecast for the production of onion and potato and the area to be used for this purpose has been carried out on the level of state and district for the year 2016-17.
- A modus operandi has been made for the assessment of the horticulture crop and the area used thereof for the farming of tomato, chilly, mango, banana, lemon and other horticultural crops.
- An assessment is being made for opening new cold storage for potatoes in Bihar under infrastructure component under tele sensational project.
- The mapping of mango, banana and lemon is being carried out in the states giving more productions too these crops and they are being laid in Bhuvan platform.
- While utilizing LISS-III data, the assessment of menthol area in Barabanki distt. of Uttar Pradesh is being prepared.
- The analysis is being carried out for the venue demarcation in the perspective of horticulture extension for a single crop for single district amongst eight north eastern states.
- Jio sapatial application has been made in Bhiwani district of Haryana.

- Renovation for the orchard related studies has been made in respect of mangoes in Lucknow district of Uttar Pradesh.
- The analysis related to soil appropriation for planting mangoes in Nujvid Commissionary of Andhra Pradesh was carried out.
- An another Geostatistical study for the farming of foxnut was carried through in Darbhanga district of Bihar. The programme has been made for planting foxnut on the new chuncks of land.

#### 2. Integrated Farming

Our government is utilizing consolidated agriculture system (IFS). IFS concentrate multi cropping system, cycle cropping, inter cropping, allied activities like horticulture, live stock, fisheries and Bee keeping etc. along with allied crop practices. Which only enhanced the production for the sustained livelihood of the farmers but also reduces the phenomena of drought, flood and other tremendous seasonal incidents. The IFS methodology are based on agriculture protection outlook which ascertain minimum loss by adopting maximum ploughing utilization of crop process, residuals the surface of soil as well as local and temporary crop order/crop cycle. This can lead maximum benefits through the inputs along with the adverse affect of the environment can also be reduced.

- There are many more advantages ٠ of consolidated agriculture system. One of the advantages is the enhancement of agricultural productivity in a sustained way in rain fed area while adopting the above said agricultural system based approaches and to reduce the adverse affects due to the potential crop failure owing to drought, flood or in ordinary hailstorm through vivid and allied agriculture system. To reinstate the trust in rainfed area agricultural net work by creating sustained agricultural opportunities through reformation agricultural the methodology and technology to enhance livelihood resources and income of the farmers.
- The farmers have witnessed also 40% enhancement in their annual income through consolidated agriculture system.
- Consolidated agriculture system is being promoted through rain fed area development (RAD) scheme of the Department which is a component of national sustained agricultural mission (NMSA). NMSA operated has been since 2014-15 which aims at transforming agricultural sector into more producing, sustainable, beneficial and climate friendly by promoting rain fed technologies soil health management, venue consolidated/mingled specific farming systems, soil and humidity preservations measures etc.
  - Under rainfed area development

scheme (RAD) the rainfed agriculture is being made more productive, sustainable, beneficial and climate friendly by promoting consolidated/ specific venue agriculture allied system. The preservation of agricultural methodology for the sustained use of natural resources is also being promoted.

INTER CROPPING : Under this system, two or more than crops are grown simultaneously. The main objective of inter cropping is to produce more yield in the same field by affectively utilizing the sources available without affecting the vield of main crop. Under National Food Security Mission through inter cropping system maize, bajra, jowar, ragi, small millets, oil seeds and cotton etc. is sown along with pulses so as to attain more and more production through both crops. Inter cropping system is prevalent mainly in Barrani areas because a better production can be achieved even in deficient rainfall season during kharif. In case of the failure of main crop the farmers get the yield of another crop. This sort of crop is also condusive in preventing soil erosion. It also helps in reducing the adverse affect of crop disorder, pastes and weeds. Intercropping system is mainly prevalent in Madhya Pradesh, Karnatka. Pradesh, Andhra Chhatisgarh. Jharkhand. Rajasthan and Maharashtra etc.

#### 3. Agroforestry:

- The existing government has for the first time launched agro forestry sub-mission scheme in 2016-17 for planting trees on every meadow along with crops/cropping system in the fields. This scheme is being implemented only in those states where there are relaxation in the rules of transporting the timbers. Under this scheme, 8 states have witnessed the implementation of this scheme during 2016-17 and 13 more states have experienced this process thereof during 2017-18 after they have been given relaxation in transportation related rules and regulations.
- Agro forestry is not only conducive in enhancing the longevity of soil but it also creates the additional resources of income for the farmers. There has been made a provision for Rs. 100 crore as the share of union government for the implementation of this scheme during 2017-18. The aim of this programme is to promote plantation along with farming and to extend the area thereof, provide plantation material to of quality improved seeds, to make different agriculture forestry methods/models popular. to prepare data base in agro forestry, to assist for providing information and knowhows and to facilitate assistance regarding capacity building.

 In order to increase agricultural and non-agricultural activities in this year budget National Bamboo Mission has been proposed as a new way with a fund of Rs. 1290 crore. Through this, small industries of bamboo can be established which will be helpful in increasing the income of the farmers and creating new jobs.

#### 4. White Revolution

- This is the first government after we have obtained independence who not only focused on the economic development of the farmers along with agricultural growth but also taking concrete and substantial measures for the development of the farmers on grass root level. For this purpose, Deptt. of Livestock Dairy & Fisheries has not only made the productivity of livestock, as double but also achieving the new dimension for white revolution. The Department aims at making India on the top in the field of fisheries through blue revolution. For this purpose, we will have to accelerate the pace of white revolution and develop species of domestic bovines and Mahish bovines.
- The projects have been sanctioned in 28 states of the country with the funds of Rs. 1496 crores under National Gokul Mission for making the productivity of domestic bovines as double. Through this process the species of 41 domestic

bovines and 13 mahish bovines is being promoted and developed.

- A sum of Rs. 197.82 crores have been sanctioned for 20 Gokul Grams in 13 states under Gokul Gram Yoiana. For the first time two national Kamdhenu Breeding in Chintaldevi district Centre Nellore. Andhra Pradesh and Itarsi. Distt. Hoshangabad (MP) with the funds of 50 crore rupees are being established for the preservation promotion of and overall development of domestic bovines with scientific way. Kamdhenu centre in Andhra Pradesh has almost been completed.
- Rs. 9 crores milch animals will be provided Nakul Swasthya Patra facilities with the fund of Rs. 825 crores under National Bovine producity mission. More than 5 lakh bovines has been identified since January 2017.
- E-livestock portal has been set up in Nov. 2016 for linking the domestic bovines and farmers together. By now more than 4.75 crore semen doses have been sold out. The thorough description of more than 79,658 bovines and buffaloes have been provided on this portal so that a willing farmer could buy them.
- The progress in dairy development sector is more speedy. As far as the dairy development is concerned India ranks first and contributes 19 percent of the world's total milk production. In comparison to 2013-14, the milk production has

increased to 20.12% in the year 2016-17.

- Availability of per capita milk has increased from 307 grams in 2013-14 to 355 grams in the year 2016-17. Similarly, the income of dairy farmers increased by 23.77% in 2014-17 compared to 2011-14. The annual growth rate of milk production was 4% in the year 2011-2014 which has now become 6% in 2014-17. While the annual growth rate of milk production in the world is 2% in 2014-17.
- The average milk procurement by the cooperatives during 2016-17 has become 448.51 lakh litres per day (LLPD). Under National Dairy Development Scheme (NDP) the additional capacity for 10.50 LLPD processing and 7.72 LLPD cold storage has been set up. Now declaration has been made for implementing DIDF (Dairy Processing and Infrastructure Development Fund) with the expenditure of 10,881 crore rupees under the ambitious mission of white revolution during the span of 3 years.
- This year -2018-19 a budgetary provision of Rs. 2,450 crore for Animal Husbandry Infrastructure Development Fund (AHDF) has been announced.

#### 5. Blue Revolution

 Keeping in view the tremendous potentialities of fisheries, our Hon'ble Prime Minister has declared this sector as blue revolution. The scope of blue revolution encircle the enhancement fisheries production and productivity through inland and marine fisheries resources along with multi dimensional activities. The government has also started a new scheme with the name of deep sea fishing under the umbrella of blue revolution.

- A scheme with the fund of rupees 3000 crore has been declared in December, 2015 for achieving the targets of blue revolution under which 50% enhancement in fish production will be earmarked in the forthcoming span of 3 years i.e. by 2019-20. It will be increase to 15 million tones during the last 3 financial years i.e. 2014-15 to 2016-17. The state and union territories have been released rupees 1214.00 crore for the implementation of blue revolution scheme. There has been an enhancement of 20 % fish production during 2014-17 as compared to 2011-14 which records an unprecedented phenomenon.
- During 2018-19, Budgetary provision of Rs. 7,550 crore has been made for Fishery & Aquaculture Infrastructure Development Fund (FIDF).
- The poor poultry farming households are being provided complementary income related assistance under Rural Backyard Poultry Development Scheme. Under National livestock development mission the rarest of goats, sheep, pig and ducks are

being provided the opportunity for enhancing their income as well as creation of awareness among them.

#### 6. Honey revolution

- An amount of Rs. 29.15 crores released to National Bee Board (NBB) during last four years (2014-15 to 2017-18) which is 242.94 % more in comparison of Rs. 8.50 crores released during last four years (2010-11 to 2013-14).
- 24,071 farmers / beekeepers have been trained in scientific beekeeping up to 31st January, 2018.
- 7637 beekeepers/beekeeping & honey societies/firms/companies etc. with 12.41 lakh colonies have been registered as on 31st January, 2018.
- No. of bee colonies have been increased by 14 lakhs during last four years (2014-15 to 2017-18) i.e. from 20 lakhs in 2013-14 to 34 lakhs in 2017-18 (estimated).
- Honey production increased by 28.57 % i.e. from 2,86,950 MTs in 2010-14 to 3,68,930 MTs in 2014-18 (including estimated 1,05,000 MTs for the year 2017-18).
- 14 Integrated Beekeeping Development Centres (IBDCs)/ Centres of Excellence (CoEs) as role model for beekeeping have been commissioned by NBB during the years 2015-16, 2016-17 & 2017-18 in 12 States, one each in Haryana (Deptt. of Horticulture, Kurukshetra), Delhi (IARI, PUSA),

Bihar (KVK, Piprakothi, Motihari), Punjab (PAU,Ludhiana), Madhya Pradesh (KVK, Morena), Uttar Pradesh (IIVR, Varanasi), Manipur (CAU, Imphal), Uttarakhand (KVK, Dehradun), Jammu & Kashmir (SKUAST, Srinagar), Tamil Nadu (TNAU, Coimbatore), Karnataka (UHS, Bagalkot), HP (Chaudhary Sarwan Kumar (CSK) Himachal Pradesh Krishi Vishwavidhyalay, Palampur), West Bengal (ICAR-Central Institute for Subtropical Horticulture, Malda) and Tripua (Director of Horticulture & Soil Conservation. Tripura). The approximate cost of these centres ranges from Rs. 1.50 to 3.00 crores, except IBDC at Haryana for which about Rs. 10.50 crores approved under Indo-Israel Project. Proposals from other States, viz.; Guiarat is under consideration. Up to 2013-14, as such no IBDC was set up.

- Designed technical standards for food grade plastic containers for storing honey, which helped in minimizing the problem of presence of Lead in honey.
- Convinced NDDB/GCMMF/ Dairy Cooperative System for beekeeping and marketing of honey to explore the possibilities for utilising milk routes/NDDB's infrastructure/ cooperative network in the field.
- Safal Brand of Honey launched by Mother Dairy under technical

guidance/advice & support of NBB and honey is being sold at Safal Outlets in NCR.

- National level Seminar on Beekeeping organized by NDDB & NBB on 10.2.2017 at Anand.
- 150 officials / representatives / members / farmers of Banas Dairy Union and Kolhapur Dairy Cooperative trained in beekeeping by NBB. Trained farmers/ beekeepers started beekeeping.
- Banas Brand of Honey, launched by Hon'ble Prime Minister on 10th December, 2016 at Palanpur, Gujarat.
- Setting up of Honey Testing Lab by NDDB in Anand has been approved.
- A draft EFC Memorandum for a Central Sector Scheme titled "National Beekeeping and Honey Mission (NBHM)" for overall promotion and development of beekeeping, has been prepared and submitted by National Bee Board (NBB). In this scheme. among other activities, promotion of scientific beekeeping for pollination support & honey production, setting up of Integrated **Beekeeping Development Centres** (IBDCs), setting up of honey & other beehive products collection, primary processing, packaging, branding, etc. centres, storage, etc. and setting up of honey processing & export units/plants, etc, have been proposed.

#### **Agricultural Progress through Research**

For rendering the dream of Government of India into reality regarding doubling the income of farmers as double by 2022, Indian Agriculture Research Council has constituted state wise coordination committees. The main task of this committee is to prepare extensive strategic documents for making the income of the farmers double.

For making the deployment of scientists transparent for the better research activities, the process related has been made on line. The parameters has been laid down for such excellent scientists in modified score cards who are deserving to participate in uplifted research management. The specific subjects have been included in the parameters of score cards. The salient feature of this project is that the candidate will be capable enough to behold inputs provided in the software through computerized score card. It will increase the transparency in the better assessment of the candidate and the scientists having better achievement will deserve the post of senior research management.

The research related endeavours are of paramount importance for the enhancement of agriculture production. In this direction, during the last 3 years, ICAR has developed 571 new crop species giving better yield in adverse natural intolerant conditions. Apart from this, the council has developed 11 new bovine species along with better agriculture methods.

150 seed hubs have been established across the country for bringing about self dependence in the field of pulses production that resulted in 22 million tons record production of pulses.

The council has prepared 623 district contingency scheme as yet for increasing tolerance for the crop in the condition of adverse natural calamities. They are continuously striving for making them updated. The farmers will be capable enough for saving their agricultural product even during adverse natural circumstance on account of receipt of advisory in time.

Specifically 42 unified agriculture system models have been developed for enhancing the income of small and marginal farmers in the country. For this purpose, livestock, poultry and horticulture is being specifically focused. The advance demonstration of these models at 325 locations are being carried out for encouraging the farmers through the institutes of ICAR, Universities and KVKs.

The Council has put specific stress on the reinforcement of higher agriculture education. Now the skill development of the students related to students ready programe has been included for thorough one year so that the students might convert themselves as agriculture entrepreneurs by achieving more experience in this field and consequent upon may provide opportunities of employment to others. While taking one more step ahead in this direction, the agriculture education has been declared a professional degree. It will help these students in achieving the opportunities of employment and higher education.

The advance line demonstrations have been carried out through the extensive network of KVKs (680) in order to create trust about the scientific techniques in the farmers. During the last 3 years, the council has carried out more than 5 lacs frontline demonstrations which have benefited crores of farmers and they have been motivated for adopting scientific techniques. Apart from this, the training Programmes are being conducted in order to create awareness amongst the farmers and other stakeholders.

KVK Knowledge Network Portal (http:// kvk.icar.gov.in) has been launched to share the basic information and features of agricultural science centers including contingency plans, performance timetables and consultancy. The farmers are provided mobile based agriculture advisory in this era of information technology through which more than 4 crore farmers have availed advantage. KVK knowledge portal, e-sanvad, e-learning moduls have been developed for encouraging digital farming.

The scientist of the council are always in touch of the farmers for enhancing outreach to the farmers and to implement the programme "from Prayogshala se khet tak" under Mera Gaon Mera Gaurav scheme. They also provide them appropriate scientific advisory from time to time.

The farmers are assisted in establishing agriculture primary processing centres for the farmers by the council so as to provide better return to the farmers for their products. As yet more than 160 Agriculture Primary Processing centres have been established which are proving to be very much conducive for enhancing the income of the farmers. Besides 194 new agri start up and agri entrepreneurs also have been provided technical assistance.

## A GLIMPSE RELATED TO THE STRATEGY AND DEVELOPMENT FOR MAKING THE FARMERS INCOME DOUBLE

Farmers are the lifeline of the country. The development of any country is incomplete without the development of the farmers and agriculture sector. The credit for imparting foodgrains security on sustainable basis does to the farmers. Today, the agriculture related scenario suggests that India not only independent on a number aaricultural commodities of but also exporting different agricultural products. This is also true with this fact that our schemes have been production concentrated but income focused schemes could not be formulated well. Consequent upon the farmers are unable to obtain remunerative price of their products what's why the Govt. of India is of the view that the agriculture sector must be paved towards development with the multidimensional facets along with the increasement in agricultural products. The income of the farmers enhanced. With must be this objective, a rally which was organized in Bareilly on 28.02.2016, the Hon'ble Prime Minister while addressing it had said "I desire to make the farmers income double on the juncture when India might be celebrating its 75th Anniversary of Independence on 2022. I have accepted it as a challenge. However, it's not only a challenge it's a good strategy and planned programme. This goal may be obtained through the provision of adequate resources and effective implementation of the scheme".

The government of India is expeditiously working for doubling the income of the farmers by the year 2022. For this purpose the Government had constituted Inter Ministerial committee on 13.04.2016 under the chairmanship of Chief Executive Officer, National Rainfed Area Authority, Department of Agriculture and Farmers Welfare for recommending the strategy relating to the matter of doubling the income of the farmers by 2022. This committee has been extending advice regarding the different interventions for pondering over this issue. Whatever committee has suggested, the Ministry has been implementing that with the help of State governments.

For preparing an extensive scheme for doubling the income of the farmers by 2022 as per the promises made by Hon'ble Prime Minister Shri Narendra Modi, the Government of India has reconstituted a committee on the subject on 13.04.2017 which will be comprised of Senior Economists pertained to the Department of Economic and Statistics, the Statistic Advisor, the Joint Secretaries of Food

Processing, Crop, Livestock and Dairy as well as Policy Division, Agriculture Advisors to NITI AYOG. Horticulture Commissioner, Managing Director of National Cooperative Development Corporation, Chief Executive Officers of National Cold chain Development Centre, Director of National Agriculture Economic and Policy Research Institute and a number of non-official members. This Committee comprised of 8 members aims at to divert agriculture sector from production focused to income focused centre. The committee is to identify potential areas which are required much more investment. Along with the committee desires to sort out the problems related to the losses inflicted on agriculture sector along with the development of horticulture, livestock and fishery, etc. Apart from this, the committee submit its recommendations will regarding reduction of agricultural costs along with the variability of rates in terms of agricultural commodities.

To study the current income level of farmers/agricultural labourers, to measure the historical growth rate of the current income level, to determine the needed growth rate to double the income of farmers/agricultural labourers by the year 2021-22, to consider and recommend various strategies to be adopted for doubling of farmers income, to recommend an institutional mechanism to review and monitor implementation to realize the goal.

There is no doubt this is an ambitious

scheme and a multidimensional strategy is to be adopted by Gol. Therefore, Hon'ble Prime Minister has recommended 7<sup>th</sup> points strategy for obtaining this goal in which the following are included:

- 1. Special focus on irrigation with sufficient budget, with the aim of "Per Drop More Crop".
- Provision of quality seeds and nutrients based on soil health of each field.
- 3. Large investments in Warehousing and Cold Chains to prevent postharvest crop losses.
- 4. Promotion of value addition through food processing.
- 5. Creation of a National Farm Market, removing distortions and e-platform across 585 Stations.
- 6. Introduction of a New Crop Insurance Scheme to mitigate risks at affordable cost.
- 7. Promotion of ancillary activities like poultry, beekeeping and fisheries.

Now. the aovernment while differentiating the outlook of action and and demonstrating saying its commitment has made an unprecedented provision in the budget 2018-19 for agriculture sector. The budgetary allocation to the Ministry of Agriculture and Farmers Welfare has been increased from Rs 51.576 crore to Rs. 58,080 crore. The budget allocation and its increasement in percentage has been reflected in the following table regarding each and every points related to 7 points strategies laid down for doubling the income of the farmers.

Sectors	Budgetary provision (in crores)		Budgetary provision (in crores)
	2017-18	2018-19	
Crop Insurance	9000.75	13014.15	44.59%
Micro Irrigation	3400	4000	17.65%
Bio-farming	450	520	15.5%
Agriculture Mechanization	577.58	1200	107.76%
Agriculture Extension Submission	932.72	1040.88	11.6%
Agriculture Education	694.66	725.13	4.3%
Agriculture Research	2166.46	2914.77	34.6%
Rainfed Area Development	223	234	4.93%
Dairy Development	2318.97	2788.28	20.24%
Blue Revolution	553.23	747.45	35.11%

Three areas has been concentrated by DIF Committee related to making the farmers income as double. These areas are as follows: (i) productivity & profit (ii) reduction in the cost of crop and (iii) beneficial price. The implementation related to the mission constituted for National Foodgrain Security and Horticulture Integrated Development Mission for enhancing the production of Agricultural commodities and the existing schemes have been interlinked for increasing the income of the farmers. Similarly, there has been made a budget provision worth Rs. 200

crore for promoting the marginal and small industries and farming sector. Apart from this a special focus has been given for promoting cluster based farming related to district wise horticulture crops.

The organic farming has been in prevalence in India since centuries which is based on organic manures and domestic techniques. It may be new technique for the world however, it has been exercised in the country since long. Almost 2 lakh farmers across the world practise the organic farming. The 80% number of these farmers dwell in India. In the budget related to the 2018-19, the organic farming on a larger chunk of land has been declared for implementing this scheme successfully. It has been proposed to have it linked with the markets. The specific benefits of this scheme will be extended to northeastern and hilly states for reducing the cost of agriculture. The government has put emphasis on the soil health card and neem coated urea along with more crop for every drop. The government has also declared for the initiation of a new scheme for underground water with a layout of Rs. 2600 crore under Pradhan Mantri Krishi Sinchai Yojana. A long term irrigation fund has been established in NABARD for a period of last 2 Years. For meeting this necessity related to irrigation construction work a specific command development project has been proposed for extending the scope concerned. For creating

beneficial income sources eNAM, dry and cold storage resources, storage infrastructure on concessional rate of interest and pro-harvesting loan necessities have been focused. Pradhan Mantri Krishi Sampada Yojana is a pioneer scheme for promoting the investment in the area of foodgrain processing. For this purpose, the budget for the year 2018-19 has been made almost double as Rs. 1400 crore in comparison Rs. 715 crore for previous budget. The farmers are installing solar water pumps in rural areas through this scheme. The farmers are not only benefited with cheap irrigation facilities but there has been made a provision for the procurement of the additional power resources generated by them.

The sustainable agriculture is being promoted through Pradhan Fasal Matri Beema Yojana, Traditional Development Scheme and Northeastern organic farming mission, etc. for adopting permanent methodology and risk management. For this purpose, during the budget, 2018-19 under Pradhan Fasal Beema Yojana, the budget provision has been enhanced 44.59 % which has been converted from Rs. 9000.75 crore to Rs. 13014.15 crore.

Market reform plays most important role in the process for doubling the income of the farmers. For the last 3 years this area is being reformed constantly in which an initiation of eNAM reformation in APMC Act etc. has been included. All these reforms aim at that the farmer should be capable in dispose of his products anywhere from his village to the any corner of the country. The new reforms have been initiated in agriculture market for providing remunerative price to the farmers for their products. In this budget, agri. market development fund with Rs. 2000 crore has been declared which displays the importance of retail market in the agriculture marketing. These markets have been named GRAM (Gramin Retail Agriculture Market) through these markets the fundamental infrastructure of 22000 Gramin Haats and 585 APMC Markets will be developed. The government is committed to provide remunerative price to the farmers along with enhancing productivity the and production of different crops.

budget 2018-19 In under the leadership of Hon'ble Prime Minister the different declarations have been made in this context. The MSP has been multiplied one half times more on the basis of the cost value of Agricultural commodities. Along with this decision, the Modi Government not only has fulfilled its promises declared in its manifesto but also paved a way for extending the benefits of MSP to the farmers. It suggests that there has been an unexpected enhancement in the production of pulses, oil seeds and crops during the last 4 years. In this budget it has been declared that NITI Ayog will set up a new provision along with central and state governments so as to extend the benefit of MSP to all of the farmers. The government is chalking out the plan for making institutional mechanism for export import policy for a long period. Through this, we shall be capable for an ambitious export target worth of Rs. 100 billion US dollars for the year 2022-23. All of the 42 mega food parks will be equipped with the state of arts trial facilities. Along with there has been made a provision for establishment of institutional mechanism for price and demand forecasting so as to be ascertained that which crop will be beneficial for the farmers in the perspective of quantity and quality.

The consumption of tomato, onion and potato is exercised across the country. During the last 70 years the farmers and consumers have to bear out the losses. Modi Governemnt has declared a new initiative with the name of Operation Green first time in the budget under which the farmers will get remunerative price of their products. The commodities will be provided to the consumers on reasonable price. For this purpose a provision has been made of Rs. 500 crore for obtaining a higher growth rate in agriculture sector. We will have to enhance capital investment.

It is very necessary to provide loan to the farmers on time. For this purpose, the total amount of credit which was Rs. 10 lakh crore in previous year has been enhanced to Rs. 11 lakh crore during present financial year. The farmers will be provided this loan on the basis of Kisan Credit Card for animal husbandry and fishery.

While treating this budget as agricultural budget all of the FPOs along with the farmers producer companies will be imparted relaxation in terms of income tax. The small and marginal farmers while constituting FPOs/FPCs will be able to avail this credit. On the contrary, the division of small land holdings will be sorted out too. Apart from this in this budget a model and licence cultivator Act has been declared under which small, marginal farmers, crop share holders will also be eligible for obtaining institutional loan. For this purpose, NITI Ayog will perform necessary action along with state governments. It is mention worthy that empowerment of gender farmers budget 2018-19 has declared an amount of Rs. 75.000 crore which was earlier 42,500 crore for this purpose.

For doubling the income of the farmers 4 strategic infrastructures have been considered. These are comprised of durable and sustainable agriculture production, monetization of agricultural products, re-strengthening of extension services as well as recognition of agriculture sector as entrepreneurship. While treating 2015-16 as a base year for the income of the farmers, the government has emphasized on agriculture related allied sectors for enhancing the income of the farmers. These sectors may be comprised of the agriculture irrigation, construction of rural roads, generation of energy and rural development etc. so that the income sources from agriculture and non-agriculture sector may be enhanced on 60:40 to 70:30 basis. For this purpose while identifying the prominent resources for development the concentration has been focused on adopting permanent production system along with system on national and state level and this has been considered as an important strategy for increasing the growth rate in agriculture allied sector.

The government is focusing on different additional income sources for the farmer like livestock, poultry, bee keeping, fishery and dairy. With a provision of Rs. 1290 crore a new mission with the name of National Bamboo Mission has been declared in this budget. Not only small scale industry will be established but also the new opportunity for the employment will be created. The government is of the view that enhancing the income of the farmers these additional sources of income are of paramount importance for the farmers. For this purpose the government has launched National Livestock Mission, Gokul Mission, Blue Revolution. Bee Keeping, Poultry Scheme etc. During last few years, Dairy, Poultry, Bee Keeping, Fishery has made a tremendous success recorded on their end. National Livestock Mission (NLM) which has been launched during 2015-16, all of the states as well

as UTs have been covered thereof. In addition to this livestock product methodology, capacity building of the stakeholders. livestock production etc. also have been covered. This mission aims at for a sustainable development of the livestock sector with a provision of quality fodder for the cattle. Northeastern states have been continuously demanding aid for the overall development of pig rearing under Pig Development Submission. Government of India is providing assistance to the 8 states for importing germ plasm for state pig rearing farms so that quantity of protein may be enhanced along with the opportunity of livelihood. The aovernment has initiated integrated fisheries development and management schemes which have been named as Blue Revolution under which inland fisheries, aquaculture farming, marine fisheries, marine culture and national fisheries development board are included. Apart from budgetary allocation, there has been made a provision of outlay of Rs. 10,000 crore for fisheries and aquaculture infrastructure development and infrastructure animal husbandry development. Through this scheme, cheap loan will be provided to the state governments, cooperatives, personal investors for fisheries and livestock basic infrastructure. This will expedite the process of construction of fish landing centre, cold storage, ice plant, transport facility processing unit and hatch rich etc.

DIF committee has carried out several important activities by now for doubling the income of the farmers in which the identification of learning participants with NCAER and NCCD as well as six meeting of full committee and 30 meetings of partial committee have been organized while including more than 35 clusters and subclusters thereof. The committee has also submitted its report on annual income calculation of the farmers on state wise basis. In addition to this, NABARD has organized one national level and 6 regional level conferences along with the states. The states are also being inspired for preparing their own strategy for doubling the income of the farmers. Besides, some of the states like Rajasthan, Chhatisgarh, Madhya Pradesh, Aurnachal Pradesh have shared their strategy with central aovernment. Simultaneously for chalking out state level strategy Indian Agriculture Research Council has also constituted state coordinating committees under the chairmanship chancellors Stakeholder of the debate has been organized while incorporating seed private sector, government organization and farmer bodies during 14-21 March, 2017 on the different issues like Agriculture Mechanization. Irrigation. Seeds. Pesticides. fertilizers. marketing. research and development, loan, farming. information organic technology and extension, etc. for doubling the income of the farmers. A policy paper prepared by NITI Ayog

has also been included in the DIF Report while sharing it with all of the states.

DIF Committee has decided for preparing an extensive report in 14 volumes while selecting the subjects impacting the income of the farmers so that the willing stakeholders could suggest their constructive remarks after they have gone through it minutely. In this respect, inter academic debate has also been invited.

On the basis of all these inputs, DIF committee will assign its integrated report to the government in this very month. Along with this committee will have been giving its recommendations for implementing this report by the government. Committee will also evaluating unification been the and phased modifications running programmes. The committee will have also been committed for an unabated development of agricultural sector in the form of profession.

By now keeping in view 7 sources like (i) crop productivity reformation, (ii) Livestock productivity reformation (iii) resource use skill (cost saving and stability) (iv) enhancement in crop density (v) diversification through much valued crops (vi) reformation in real prices obtained by the farmers and (vii) keeping in view the change in agricultural and non agricultural activities. The DIF committee has shared interim recommendations with the government which are being implemented through the provision of necessary budget and existing running schemes. The gist of the main recommendation extended by DIF committee are as follows in which government has initiated a viable step while making budget provision for this purpose:

- to put more emphasis on livestock sector on the basis of 3.8%, 14.7 %, 0.5 %, 1.6% growth rate related to agriculture livestock non agricultural professions and wages.
- a constructive relation to (ii) be established between agriculture and investment in field of agriculture growth so as to increase investment in public sector related agriculture particularly for to corporate sector
- (iii) to extend priorities for the process of market intervention and crop production
- (iv) to capture leftover products of the farmers with pro-harvesting interventions along with 100% price
- (v) to increase the capacity withholding the yield of the farmers
- (vi) strengthening the basic infrastructure for storing dry and wet commodities
- (vii) new market initiative like electronic trade, single trade licence, single window for the levy of market fees, check on market fees, promotion of contractual farming, constitution of agriculture value system front /

platform, unification of every farmer in value series, 25% extension and engagement of ATMA personnel in marketing sector, etc. have been included

- (viii) the sustainable practices in production like water preservation, integrated farming system, watershed management and organic farming etc. be to implemented
- (ix) the agricultural and agriculture related activities like bee keeping, mushroom farming, manure preparation, farming of laakh and agro-forestry etc. are to be promoted
- (x) to revive agriculture extension program like to increase central assistance from 60 to 75% for filling up the vacancies for the personnel related to the ATMA and extension, put emphasis on the inclusion of ICT and women power in extension activities
- (xi) to concentrate on other infrastructural reforms.

At present all of the running program initiatives only aim at for doubling the income of the double by 2022. For this government is taking necessary steps. The budget 2018-19 also reflects that to what degree government is committed for enhancing the income of the farmers. We are confident that the target of the prosperous farmers may be achieved in Independent India and we are taking a fast track in this direction.

# **IMPORTANT DAY**

1. World Forest Day	21 March
2. World Veterinary Day	Last Saturday of April
3. World Milk Day	01 June
4. National Fish Husbandry Day	10 July
5. Foundation Day of Indian Council of Agricultural	16 July I Research
6. World Honey Day	20 August
7. World Coconut Day	02 September
8. World Egg Day	Second Friday of October
9. National Women Farmers Day	/ 15 October
10. World Food Day	16 October
11. World Fish Day	21 November
12. National Milk day	26 November
13. National Agri. Education Day	03 December
14. World Soil Day	05 December
15. Jai Kisan jai Vigyan Week	23 to 29 December





Ministry of Agriculture & Farmers Welfare Goverment of India

Website: http://agriculture.gov.in