

PROGRAMMES AND SCHEMES (SCHEMATIC DESCRIPTION)

(A) STATE PLAN SCHEMES

1. Quality Seed Multiplication and Distribution:

Department owns 20 Seed Multiplication Farms, 3 Vegetable Development Stations, 1 Ginger Development Station and 12 Potato Development Stations where foundation seeds of Kharif and Rabi crops are produced. Annually about 3500 to 4000 quintals seed of cereals, pulses and vegetables are produced in these farms. Further about 90,000 quintals of certified seeds of various crops are distributed to the farmers in the state. At present 5 grading centres are in operation for various crops. Under this scheme, expenditure on seed multiplication farms, seed stores, seed testing and certification, subsidy on cost of seeds and cost on demonstrations etc are met.

2. MANURE AND FERTILIZERS:

I) DISTRIBUTION OF FERTILIZERS:

The State Govt. has allowed cost subsidy on complex fertilizers NPK 12:32:16, NPK 10:26:26 and NPK 15:15:15 @ Rs.1000/-per MT. Apart from this cost subsidy @25% is also being provided on 100% water soluble complex fertilizers to the farmers (limited to Rs. 2500 per farmer). In order to ensure adequate supply of fertilizers, the Govt. has entrusted this responsibility to HIMFED/Cooperative Societies. The farmers are educated about balanced use of fertilizers and as per soil testing nutrient basis.

II) SOIL TESTING CENTRES:

Soil testing has great importance for raising agriculture production. The department is providing free soil testing facilities to the farmers. Department has 11 Soil Testing Laboratories besides seven mobile soil testing labs to provide free soil testing facilities to the farmers. Besides this Soil Health Cards are being provided to the farmers. The Government of India has launched a new scheme based on which the sample of soil shall be drawn on GPS basis. About one lac samples are analysed annually. Outlay proposed is to meet expenditure on these labs for testing of soil samples. Soil testing service has also being included under H.P. Govt. Public Service Act, 2011 in which the soil health cards are being made available to the farmers through online service within prescribed time limit.

3. PLANT PROTECTION:

The Department exercise vigil on pest situation. To overcome this, about 150 MT of pesticides through 991 outlets are supplied to the farmers. Besides this, Pesticide Testing Laboratory at Shimla has been set up with a capacity of 150 to 250 samples per year. One Bio Control Laboratory has been set up at Palampur where conservation pest situation augmentation, rearing and multiplication of bio-agents and training to extension staff and farmers are being done. Another Bio Control Laboratory has been set up at Mandi and will be made functional very soon.

This is a continued scheme and the provision is made for meeting the expenditure on transportation and subsidy on the cost of plant protection material. The plant protection material including equipments are supplied to the SCs / STs /IRDP families at 50% cost. The outlay proposed is to meet expenditure on subsidies.

4. COMMERCIAL CROPS:

Under diversification approach, major emphasis is being laid on the production of Off-season vegetables, quality vegetable seeds, Potato and Ginger besides Soybean, Oilseeds and Pulses.

a) Development of Seed Potato:

The Department owns 12 Potato Development Stations where foundation seed potato is produced. Due to "Seed Plot Technique" in the plains, the Potatoes of plains are causing tough competition in marketing of seed Potato from H.P. Therefore, a policy has been devised to diversify the area under Potato towards cash crop, market maximum potato as table and produce only that much seed potato which can easily be marketed outside the State.

b) Development of Vegetables including Farms:

Himachal Pradesh has gained reputation in cultivation of off-season vegetables and production of quality vegetable seeds. There is a great demand of off-season vegetables in the plains. The ongoing programme i.e.

cultivation of off-season vegetables and production of vegetable seeds is proposed to be strengthened and organized on an extensive scale during 12th Plan for providing higher income and employment.

The suitable areas in the State for the purpose of vegetable cultivation would be intensively surveyed and identified and the farmers in the newly identified areas would be encouraged to take up these programme, demonstration on vegetables cultivation are done for the small and marginal farmers in these areas, so that the farm income of these rural poor can be improved and country can be supplied with the vegetables in off-season. The cropping pattern shifts from cereals to vegetables would be specially monitored in all such areas as are being brought under the culturable command area of the new irrigation schemes. Annually about 15.0 lakh tonne vegetables are produced and marketed within and outside the State.

c) Ginger Development:

For production of disease free ginger, the Department is providing training, demonstrations and quality seed. About 35,000 tonnes of green ginger is produced annually which is marketed within the State and at the neighbouring States.

5. QUALITY CONTROL:

Under this scheme, implementation of various acts on seeds, fertilizers and pesticides is ensured. Quality control functionaries have been notified. The Department has three fertilizer testing labs (Hamirpur, Sundernagar, Shimla), one state pesticides testing lab at Shimla, Biofertilizer and Biopesticide lab at Palampur and three seed testing labs (Solan, palampur and Mandi). 2000 fertilizer samples, 300 pesticide and 800 seed samples are being analysed annually.

6. EXTENSION AND FARMERS TRAINING:

Main function of the Department is to disseminate the technology to farmers. The Department runs two training centres, one at Mashobra and other at Sundernagar. Besides this farmers training camps are organised at village, block and district level. The outlay proposed is for meeting expenditure on training and demonstrations.

7. AGRICULTURAL ECONOMICS & STATISTICS:

Under this programme, three centrally sponsored schemes viz (i) Timely Reporting Scheme (TRS) for estimation of area and production of crops (ii) Improvement of Crop Statistics (ICS) for bringing quality in the land record data at grass root level and (iii) Estimation of Production of Commercial crops like Potato and Ginger. The estimation is done accordingly to statistical techniques. Production estimates on principal crops like Wheat, Barley of Rabi season and Maize, Paddy, Potato and Ginger crops of Kharif are released on the basis of results of crop cutting experiments conducted accordingly Random Sampling Method. The Director of Land Records is the agency in the State responsible for collection and release of area estimates, forecast report etc.

This is a continued scheme for meeting salaries of the staff under Timely Reporting Scheme and the Scheme of Improvement of Crop Statistics. These schemes converted in to 100% CSS from the financial year 2008-2009 onwards.

8. AGRICULTURAL ENGINEERING:

Under this scheme, new farm implements/ machines are popularized among the farmers. Testing and demonstration of new machines is also done under this programme. The outlay proposed is towards subsidies and salaries of the staff.

9. HP CROP DIVERSIFICATION PROJECT (JICA ODA Loan Project)

Himachal Pradesh Crop Diversification Project being supported by JICA through ODA loan. The study on diversified agriculture for enhanced farm income in Himachal Pradesh was got conducted from Japan International Cooperative agency (JICA) w.e.f. February, 2007 to December, 2008. Draft report of the study was submitted by JICA in December, 2008 and final report in March, 2009. The study was fully funded by JICA as grant under bilateral cooperation. The report contains Crop Diversification Action Plan for 10 years and Master Plan for 15 years. Based upon the crop diversification potential, the state has been divided into four categories as under;

Category	No. of Blocks	Status /Potential	Major Districts
I	21	Diversification in advance stage and limited potential for expansion.	Kinnaur, Kullu, Lahaul & Spiti, Shimla, Solan, Sirmaur.
II	11	Potential for area expansion.	Kangra and Mandi
III	30	Large potential for area expansion.	Bilaspur, Hamirpur, Kangra, Una
IV	13	Limited potential for crop diversification, potential for integrated farming i.e. Horticulture, Animal Husbandry etc.	Chamba, Bilaspur, Shimla
Total	75		

JICA Contact Mission visited the state from 23-25th June, 2009 and had detailed discussion with State Government. The Mission showed their willingness to consider JICA ODA Loan for crop diversification project. The State was willing to cover entire state under the project and to provide JICA ODA Loan of Rs.949.00 crores as per the Master Plan projections but the JICA Mission expressed that rather than covering entire state from the outset (which requires extensive resources for implementation and longer time for project outcome), it would be more sensible to start the project by focusing in certain regions, crops, so as to get faster and tangible results. The result of the project can be replicated to other regions. It was also suggested to take maximum 4-5 districts with project cost of Rs. 250-300 crores.

Based upon the JICA study and JICA Contact Mission report, Five districts comprising of Kangra, Mandi, Hamirpur Bilaspur and Una which fall in category II & III i.e. most potential for crop diversification were included in the project and based upon the outcome of this project, matter can be taken with JICA to sanction second phase of the project for left over districts.

The project proposal was submitted in May, 2009 to the Govt. of India for approval and financing. After series of discussions, the projects Minutes of Discussion (MoD) were signed between Govt. of India, JICA and Govt. of Himachal Pradesh on 01.10.2010 at New Delhi. The loan agreement was signed on 17th February, 2011 between Ministry of Finance, Govt. of India and JICA and loan effectuation was done from 16th June, 2011. Global Tender Notice for Expression of Interest [EOI] for procurement of Project consultants has also been floated on 1/3/2011. The flow of funds from ODA shall be on the basis of reimbursement, therefore, earmarked token provision for this Project in the Annual Plan Budget for the year 2011-2012 of Rs. 8.20 crores was made in annual plan 2012-2013, outlay of Rs. 20.00 crore has been made for execution of this project. The project area comprises 5 districts Kangra, Mandi, Hamirpur, Bilaspur and Una. The project period is 7 years i.e. 2011 to March, 2018 and the total project cost is Rs. 321 Crores (Loan Rs. 266 crores and State share Rs. 55 Crores). The launching of the project was done on 14th August, 2011.

Objectives of the Project:

1. Increase the area and production of vegetables through crop diversification.
2. To raise income of small and marginal farmers.
3. To create infrastructures for irrigation, farm access roads, marketing, post harvest etc.
4. To promote organic farming in a big way.
5. To organize farmers into groups to take over operation and maintenance of irrigation systems.
6. Training and capacity building of Department of Agriculture field extension staff.
7. The project is being implemented through **Himachal Pradesh Agriculture Development Society**. It has Governing Council, Executive and Finance Committee. For overall management of the project, State Project Management Unit (PMU) has been set up at Hamirpur, three District PMU's at Palampur, Mandi, Hamirpur and 8 Block PMU's at Dehra, Nurpur, Baijnath, Hamirpur, Una, Bilaspur, Mandi, Sarkaghat have been set up.

Project Components:

1.	Infrastructure Development (Rs. 130.21 crores)	Development of new Micro-Irrigation Systems	172 No's	2816 ha. CCA
		Improvement of Minor Irrigation Systems	38	896 ha. CCA
	Total		210	3712 ha.CCA
		Development and improvement of Farm Access Roads	147	100 km.
		Demonstration on Micro-Irrigation	52	1 Demonstration for 4 Projects
2.	Farmers Support Program (Rs. 32.02 crores)	1. Organisation of Farmers Groups. 2. Promotion of Organic Farming. 3. Vegetable Promotion Training. 4. Food grain Productivity Enhancement. 5. Post Harvest / Marketing. 6. Collection Centres (23Nos.)		
3.	Institutional Development (Rs. 34.41 crores)	1. Strengthening of Department of Agriculture, Setting up Project Management Units. 2. Strengthening of Extension Service, function and training of staff. 3. Baseline Survey / Impact Assessment/Monitoring. 4. Setting up of MIS/GIS.		
4.	Other Costs (Rs. 124.36 crores)	Contingencies, Price Escalation, Consulting services, General Administration, Tax and Duties, Commitment Charges, Interest		
	Grand Total	JICA ODA Loan : Rs. 266.00 crores (90% Grant and 10% Loan) State Share : Rs. 55.00 crores Rate of Interest on Loan: 1.4% Loan repayment period : 30 Years.		

District-wise breakup of proposed Infrastructure Development Component (tentative) of the project:

District	No. of Irrigation Projects	CCA (ha.)	Farm Access Roads (km.)	Total Amount (Rs. in lakh)
Kangra	56	1352	22.80	3769
Mandi	54	984	28.10	2807
Hamirpur	39	532	18.50	2001
Bilaspur	18	313	6.90	1037
Una	43	531	23.70	1559
Contingency 5%	-	-	-	560
Support Services (Demonstration on MIS, Farm Access Roads & Capacity Development etc.)				1288
Total	210	3712	100.00	130.21

Year-wise phasing of the project:

S.No.	Year	Financial Provision (Rs. in Crores)		
		Eligible	Non-eligible	Total
1.	2011-12	10.16	1.86	12.02
2.	2012-13	33.62	5.85	39.47
3.	2013-14	45.47	8.19	53.67
4.	2014-15	56.7	10.69	67.44
5.	2015-16	58.35	11.76	70.10
6.	2016-17	53.88	11.76	65.63
7.	2017-18	7.76	4.89	12.66
	Total	266.01	55.00	321.09

10. SOIL & WATER CONSERVATION:

Due to topographical factors, the soil is subject to splash, sheet and Gully erosion resulting into degradation of the soil. Besides this, there is biotic pressure on the lands to the curb this menace particularly on the agricultural lands. The Department of Agriculture, H.P. is executing two Soil and Water Conservation schemes under State Sector Scheme. The schemes are; (i) Soil Conservation Works (ii) Water conservation and development

11. AGRICULTURE RESEARCH AND EDUCATION:

Under this, GIA is given to Agriculture University for Teaching, Research & Extension. Emphasis is being laid on location specific research for adoption of the same by the farming community of the State.

12. Dr. Y. S. PARMAR KISAN SWAROZGAR YOJNA:

In order to achieve faster and more inclusive growth in Agriculture sector Government of Himachal Pradesh has started "Dr. Y. S. Parmar Kisan Swarozgar Yojna" (poly house and micro irrigation inside polyhouse). Project components include creation of need based infrastructure and are expected to fulfill objectives of high productivity, quality, safeguard against adverse weather, efficient input use etc.

PROJECT COMPONENTS (2014-2015 TO 2017-2018)

Sr.No.	Component	Nos.	Covered area
1	Poly Houses Framed structure	4700 Nos.	835350 Sqm..
2	Micro Irrigation (Sprinkler/Drip System Poly Houses as per feasibility)	2150 Nos.	820050 Sqm..
3	Low lift, medium lifts & pumping machinery 1 HP with poly houses as per feasibility.	870 Nos.	-
5	Total cost of civil works		Rs.10178.10 lakh.
6	Farmers Sensitization, contingency and Cost Escalation.		Rs.940.45 lakh
	Total Project Cost		Rs.11118.55 lakh

Project components include construction of location specific models of poly houses with micro irrigation facility. For this, 85% project assistance shall be provided to the farmers. Also for creation for water sources individually and collectively by a group of farmers (Low/medium lift, pumping machinery), 50% subsidy shall be provided. A budget provision of Rs. 15.0 Crore has been made for this component during 2016-2017.

13. RAJIV GANDHI MICRO-IRRIGATION SCHEME

State Government is committed to promote Agriculture in the State by increasing the productivity of crops. For efficient system of irrigation the Government has launched crucial Project named 'Rajiv Gandhi Micro-Irrigation Scheme' with an outlay of Rs.154 Crore over a period of 4 years starting from 2015-16 to 2018-19. Through this Project, 8,500 hectare area will be brought under Drip/ Sprinkler Irrigation System benefitting 14,000 farmers. Farmers will get a subsidy of Rs.113 Crore during the project period. The subsidy @80% for the installation of Micro-Irrigation systems such as Drip, Micro, Mini ,Portable Sprinkler, Semi-Permanent Sprinkler and large volume Sprinkler and 50% for augmentation of water sources would be provided to the farmers., During 2015-2016, an area of 296.88 hectares has been brought under Micro-irrigation Systems and 344 farmers were benefitted by incurring an expenditure of Rs. 1.00crore. A budget provision of Rs. 10.0 Crore has been made for this component during 2016-2017. During the year 2016-17, about 900 hectares areas would be brought under Micro-Irrigation systems.

14. ESTABLISHMENT OF CENTERS OF EXCELLENCE FOR VEGETABLE NURSERY PRODUCTION

The state Government has started new scheme named 'Establishment of Centres of Excellence for Vegetable Nursery Production' by farmers to raise the vegetables seedling, flower and other valuable plants under controlled environment to provide better planting material to the farmers and to provide gainful employment to the farming youth. A provision of Rs.1.00 Crore has been kept for 2016-2017.

15.UTTAM CHAARA UTPADAN YOJNA

With a view to increase fodder production in the State, The State Government has launched a scheme; **Uttam Chaara Utpadan Yojana** for fodder development by bringing an area of 25,000 hectare under fodder production. Quality Seed of Fodder Grasses, Cuttings, Seedlings of Improved Fodder Varieties will be supplied on subsidised rates to the farmers. Chaff Cutters are important input for farmers. Subsidy on Chaff Cutters is available to the SC/ST and BPL farmers. A provision of Rs.5.00 Crore has been kept for 2016-2017.

16.MUKHYAMANTRI KISAAN EVAM KHETIHAR MAZDOOR JEEVAN SURAKSHA YOJNA

With a view to provide Insurance cover to the Farmers and Agricultural Labourers in the event of sustaining injury or death due to operation of farm machinery, the State Government has launched a Scheme called; **'Mukhyamantri Kisaan evam Khetihar Mazdoor Jeevan Surakhsha** in 2015-2016. In case of the death and permanent disability, compensation of Rs.1.5 Lakh and in case of partial disabilities, compensation up to Rs. 50,000 will be provided to the affected. A provision of Rs.50.00 lac has been kept for 2016-2017.

17. LIFT IRRIGATION AND BOREWELL SCHEME

In most parts of the State, water has to be lifted for irrigation purpose. As an incentive to the farmers, Government has decided to grant 50 per cent subsidy for construction of Lift Irrigation Schemes and installation of Bore-Wells by individual or group of farmers for irrigation purposes. Under this scheme, financial assistance is available for construction of Low & medium lift irrigation systems, Shallow wells, Shallow Bore Wells, Water Storage tanks of different capacities , Pumping machinery and Water Conveyance Pipes to individual farmers or a group of farmers. During the year 2015-2016, the financial assistance of Rs. 20.00 crore have been disbursed to farmers for different components of scheme. A provision of Rs. 10 Crore has been kept for 2016-2017. The same will be increased as per the actual demand from the farmers.

18.AGRICULTURAL MARKETING

This is controlled in the State through H.P. Agricultural and Horticultural Produce Marketing (Development and Regulation) Act, 2005. Under this Act, H.P. State Agricultural Marketing Board has been set-up. At present, 10 market committees are functioning. 55 markets have been made functional. Market information is being disseminated through different media i.e. AIR Doordarshan print media and through net to farmers. The work of development of marketing infrastructure is done out of the funds of APMCs. Information on daily market rates is also disseminated through AIR/ DD. Market rates of 39 commodities are also disseminated through agmarknet.nic.in. The APMC act has been repeated as per the model act and provision has been made for private markets, single point market fee, contract farming etc.

19.COFFEE PRODUCTION SCHEME

The State Government has started coffee production scheme in State during the year 2014-15. In the first phase demonstration has been done on 8 hectare area with 17,500 coffee plants on farmer fields in Bilaspur, Mandi, Kangra & Una Districts. The seed for this is made available from Central Research Institute Chikmanglur. During the year 2015, 25,440 plants have been raised in the Departmental nursery for distribution to the farmers.

20. MUKHYA MANTRI KHET SANRAKSHAN YOJNA:

Monkey and wild life menace causes huge loss to crops annually. Present practice of crop protection by manual guarding goes not ensure 100 percent crop. Therefore, Government of Himachal Pradesh has introduced a new scheme **"Mukhya Mantri Khet Sanrakshhan Yojna"**. Under this scheme farmers will be provided 60 percent assistance for fencing the farm. The fence will be energized with the help of solar power or electricity. Current in the fence around the farms will be sufficient to keep away the stray animals, wild animals and monkeys from the farms. A budget provision of Rs. 25.00 Crore has been kept for 2016-2017. Approximately, crops for 1300 hectares cultivated areas shall be protected from wild/ stray animals and monkey menace under this scheme. This scheme shall be implemented in the entire state through Deputy Director of Agriculture of concerned districts. The detailed guidelines for selection criteria for farmers, service providers and operation/ maintenance including technology backup have been prepared and circulated to field officers for 5, 7 and 9 horizontal wires.

(B) CENTRALLY SPONSORED SCHEMES

1. NATIONAL MISSION ON AGRICULTURAL EXTENSION AND TECHNOLOGY (NMAET): (90:10 Central & State share)

In XIIth Five year plan, Government of India has approved new mission to strengthen Agricultural Extension services called "National Mission on Agricultural Extension & Technology (NMAET)" with following aims:

- To restructure & strengthen agricultural extension to enable delivery of appropriate technology and improved agronomic practices to the farmers.
- Judicious mix of extensive physical outreach
- Interactive methods of information dissemination,
- use of ICT, popularisation of modern and appropriate technologies,
- Capacity building and institution strengthening.
- Availability of quality seeds, plant protection.
- Encourage the aggregation of farmers into Interest Groups (FIGs) to form Farmer Producer Organizations (FPOs).

Mission comprises of four Sub-Missions:

- (i) Sub-Mission on Agricultural Extension (SMAE)
- (ii) Sub-Mission on Seeds and Planting Material (SMSP)
- (iii) Sub-Mission on Agricultural Mechanisation (SMAM)
- (iv) Sub-Mission on Plant Protection (SMPP)

(i) Sub mission on Agricultural Extension (SMAE)

Sub mission on Agricultural Extension (SMAE) will focus on awareness creation and enhanced use of appropriate technologies, Increased penetration of extension functionaries, Personnel trained under Agri-Clinics and Agri-Business Centres Scheme (ACABC) and Diploma in Agriculture Extension Services for Input Dealers (DAESI) will also provide extension services to the farmers, Use of interactive and innovative methods of information dissemination and Convergence at village level through the institution of ATMA BTTs.

During 2016-2017, work plan amounting to Rs 2281.44 lakhs has been approved by State level Sanctioning Committee (SLSC) under "Support to State Extension Programme for Extension Reforms" a scheme under SMAE, and funds amounting to Rs 866 lakhs have been allocated as central share. With matching state share amounting to Rs 96.22 lakhs, total funds available for 2016-2017 are Rs 962.22 lakhs.

(ii) Sub Mission on Seed and Planting Material (SMSP) :

Quality seed is the most cost effective means for increasing agricultural production and productivity. Sub mission will cover the entire gamut of seed chain from nucleus seed to supply to farmers for sowing , Support for infrastructure, Strengthening of Protection of Plant Varieties and Farmers' Rights Authority (PPV&FRA) and to encourage development of new varieties of plants. During 2016-2017, work plan amounting to Rs 416.67 lakhs has been approved by GOI on 90:10 sharing basis. Funds amounting to Rs 375 lakhs have been allocated by GOI as central share. Including state share amounting to Rs 41.67 lakhs, Total funds available for 2016-2017 are Rs 416.67 lakhs.

(iii) Sub Mission on Agricultural Mechanisation (SMAM) :

There is strong co-relation between farm power availability and agricultural productivity. Sub-Mission will focus on farm mechanization. And will mainly cater to the needs of the small and marginal farmers through institutional arrangements such as custom hiring, mechanization of selected villages, subsidy for procurement of machines & equipments, etc.

During 2016-2017, workplan amounting to Rs 500 lakhs has been approved and funds amounting to Rs 450 lakhs have been allocated under the sub mission as 90% central share. Out of this GOI has released Rs 250 lakhs. Funds will be utilized for providing assistance to farmers for purchase of machinery and establishment of custom hiring centers.

(iv) Sub Mission on Plant Protection (SMPP) :

Main objectives of the mission are Increase in agricultural production by keeping the crop disease free using scientific and environment friendly techniques through promotion of Integrated Pest Management, Strengthening and Modernization of Pest Management Approach and monitoring pesticide residues in food commodities and environmental samples. Sub mission is not being implemented in the state.

Statement of funds released and expenditure under NMAET (2016-2017)

(Rs in lakhs)						
S No.	Sub Mission	Approved Work plan	Funds Allocated			Funds released (GOI)
			GOI	State Govt.	Total	
1	SMAE	2281.44	866.00	96.22	962.22	
2	SMSP	416.67	375.00	41.67	416.67	
3	SMAM	500.00	450.00	50.00	500.00	250.00
	Total	3198.11	1691.00	187.89	1878.89	

2. MASS MEDIA SUPPORT TO AGRICULTURE EXTENSION (100%CSS):

The primary objective of the scheme is to use television and radio with their massive penetration, as a vehicle for agricultural extension. Basically, the scheme is focusing on two initiatives:

Doordarshan:

The first is use of Doordarshan for infrastructure for providing agricultural related information and knowledge to farming community. It has two components (i) narrowcasting using high/low transmitters of Doordarshan (ii) regional and national agricultural programmes in terrestrial mode of transmission. Presently, Doordarshan Shimla is telecasting Krishi Darshan programme between 6:00 PM to 6:30 PM five days in a week.

All India Radio:

This component of scheme envisages use of FM transmitters of AIR to broadcast area specific agricultural programmes with 30 minutes radio transmission six days a week. Presently, half an hour, Kisanvani programme is being broadcast, six days a week from FM Dharamshala and Hamirpur.

3. KISAN CALL CENTRE:

Under this, farmers can get any information on agriculture by dialling toll free number 1800-180-1551. The service is available from 6:00 AM to 10:00 PM on all days. This is 100% Centrally Sponsored Scheme.

4. CROP INSURANCE SCHEMES:

A). PRADHANMANTRI FASAL BIMA YOJNA (PMFBY):

The Government of India, Minister of Agriculture, Department of Agriculture & Cooperation, New Delhi, has implemented Crop Insurance scheme of Pradhan Mantri Fasal Bima Yojna (PMFBY) w.r.f. Kharif , 2016. Crops covered are Wheat, Barley, Maize, Paddy, Potato and Ginger. The scheme is compulsory for loanee farmers and optional for non-loanee farmers. The scheme provides comprehensive risks insurance against yield losses viz. drought, hailstorm, floods and pests disease etc. The Agriculture Insurance Co. of India (AICI) & IFFCO-TOKIO are implementing the scheme. The farmers of the State can get benefit out of this programme.

i) Objectives:

1. To provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests & diseases.
2. To encourage the farmers to adopt progressive farming practices, high value in-puts and higher technology in Agriculture.
3. To help stabilise farm incomes, particularly in disaster years.

ii) Farmers to be covered:

The Scheme covers following groups of farmers:

On a compulsory basis: All farmers growing notified crops and availing Seasonal Agricultural Operations (SAO) loans from Financial Institutions i.e. Loanee Farmers. On a voluntary basis: All other farmers growing notified crops (i.e., Non-Loanee farmers) who opt for the Scheme.

iii) Coverage of Risk & Exclusions :-

Following stage of the crop and risks leading to crop loss are covered under the scheme;

- A) **Prevented Sowing /Planting Risk** : Insured area prevented from sowing / planting due to deficit rainfall or adverse seasonal condition.
- B) **Standing Crop(Sowing TO Harvesting)**: Comprehensive risk insurance is provided to cover yield losses due to non-preventable risks viz. Drought, Dry Spell, Flood, Inundation, Pests and Diseases, Land Slides, Natural Fire and Lightning, Storm, Hailstorm, Cyclone, Typhoon, Tempest, Hurricane and Tornado etc.
- C) **Post- Harvest Losses**: Coverage is available only upto a maximum period of two weeks from Harvesting for those crops which are allowed to dry in cut and spread condition in the field after harvesting against specific perils of cyclone and cyclonic rains and unseasonal rains.
- D) **Localized Calamities**: Loss/ damage resulting from occurrence of isolated farms in the notified area.

iv) Subsidy on Premium:-

Maximum Insurance Charges payable by the farmer for the cereal crops to be covered for Kharif season would be 2% & 1.5 % for Rabi season of Sum Insured or Actuarial Rate, whichever is less. The difference between actuarial premium rate and the rate of insurance charges payable by farmers shall be treated as Rate of Normal premium Subsidy, which shall be shared equally by Centre and State Governments.

v) **Seasonality Discipline**: The broad seasonality discipline followed will be as under:

Activity	Kharif	Rabi
Loaning period	April to July	October to December
Cut-off date for receipt of declarations	31 st July	May
Cut-off date for receipt of yield data	December	August

However, seasonality discipline may be modified, if and where necessary in consultation with State / UT and the Govt. of India and it is finalised in the meeting of SLCCI which is convened in each season.

B). Restructured Weather based crop insurance scheme (WBCIS):

During Kharif, 2016 season, Four Crops, i.e. Potato, Ginger, Tomato and Peas & in Rabi season Tomato, Potato, Garlic & Capsicum are to be covered under Restructured Weather Based Crop Insurance Scheme (WBCIS). The scheme intends to provide Insurance protection to the cultivators against weather incidence such as Rainfall, Heat (Temperature), Relative Humidity, Hail Storm, Dry Spell etc, which are deemed to adversely affect the Kharif Crops during its cultivation period.

Coverage Procedure:

- (a) Insurance coverage of Loanee Applicant Cultivators shall be through the existing network of Financial Institutions (FI) at the grass-root level, using Nodal Bank system.
- (b) Insurance coverage of non- loanee Cultivators shall be through the existing network of Financial Institution (FIs) at the grass root level; the Insurance Intermediaries and Authorized Representative of Insurance Companies.
- (c) Nodal Bank Branches shall be paid by Insurance Companies, a service charges of 4% on the actual Premium amount remitted by them, being in the nature of sharing the incidental management incurred by them for servicing the scheme.
- (d)

Objectives:

1. To provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests & diseases.
2. To encourage the farmers to adopt progressive farming practices, high value in-puts and higher technology in Agriculture.
3. To help stabilise farm incomes, particularly in disaster years.

a) Perils Covered:

Following weather perils, which are deemed to cause " Adverse weather incidence", leading to crop losses, would be covered under the scheme; Rainfall, Heat (Temperature), relative humidity, Hail Storm , Dry spell etc.

Premium sharing and Subsidy:-

Maximum Insurance premium payable by the farmer for the commercial crops to be covered during Kharif & Rabi season would be 5% of Sum Insurance charges payable by farmers shall be treated as Rate of Normal premium Subsidy, which shall be shared equally by Centre and State Govts. In the bidding process L-1 have been decided at District level on the basis of lowest Weighted Average Premium (WAP).

During this year kharif season tomato crop of Solan, Bilaspur, Shimla, Sirmour, Kangra, Kullu and Mandi and for Ginger crop Solan, Bilaspur, Sirmour and for Pea crop Shimla, Kiannaur, Lahaul, Mandi, Kullu and Chamba districts have been covered under WBCIS & Potato crop of Chamba, Kangra, Kinnaur, Kullu, Lahaul , Mandi, Shimla & Sirmour District has been covered under WBCIS.

During Rabi season tomato crop of Solan, Potato crop of Kangra, Garlic crop of Sirmour and Kullu & Capsicum crop of Solan (Dharampur) Districts has been covered under WBCIS.

b) Seasonality Discipline:

The broad cut-off dates for receipt of proposals in respect of Loanee & Non-loanee farmers will be as under :

Kharif season : December

Rabi season : 31st July

5. BIOGAS DEVELOPMENT PROGRAMMES (100%):

This is 100% Centrally Sponsored Scheme under which subsidy @ Rs.7000 per biogas plant of one cubic meter and Rs.11,000/- per biogas plant of two & above cubic meter capacity is being provided. The targets for construction of Biogas plants of 1500 No's and 150 No's during the period of 12th Five Year Plan (2012-2017) and Annual Plan 2016-2017 have been fixed respectively.

6. RASHTRIYA KRISHI VIKAS YOJNA (RKVY) (90:10) CENTRAL : STATE SHARE) :

Concerned by the slow growth in Agriculture and allied sectors, the Government of India has launched a special Additional Central Assistance Scheme **Rashtriya Krishi Vikas Yojna (RKVY)**. The RKVY aims at achieving 4% annual growth in the agriculture sector during the XIth Plan period, by ensuring a holistic development of Agriculture and allied sectors. The scheme is being implemented in the State of Himachal Pradesh from the year 2007-2008 to achieve envisaged annual growth rate. This scheme has also been continued by the Govt. of India during XIIth Plan.

a). Objectives of the scheme:

- I. To incentives the states as so as to increase public investment in Agriculture and allied sectors,
- II. To provides flexibility and autonomy to states in the process of planning and executing Agriculture and allied sector schemes,
- III. To ensure the preparation of agriculture plans for the districts and the states based on agro-climatic conditions, availability of technology and natural resources,
- IV. To ensure that the local needs/ crops/ priorities are better reflected in the agricultural plans of the states,
- V. To achieve the goal of reducing the yield gaps in important crops, through focused interventions,
- VI. To maximize returns to the farmers in Agriculture and allied sectors,
- VII. To bring about quantifiable changes in the production and productivity of various components in Agriculture and allied sectors by addressing them in a holistic manner.

b). Area of Focus under RKVY:

- I. Integrated development of major food crops such as wheat, paddy, coarse cereals, minor millets, pulses & oilseeds.
- II. Activities related to enhancement of soil health and mechanization.
- III. Development of rain fed farming systems in and outside watershed areas.
- IV. Support to state seed farms and IPM.
- V. Strengthening of market infrastructure and marketing development.
- VI. Strengthening of infrastructure to promote extension services.
- VII. Activities relating to enhancement of horticultural production and popularization of micro irrigation systems.
- VIII. Animal husbandry and fisheries development activities.
- IX. Organic and bio-fertilizers and innovative schemes.

Govt. of India has conveyed an interim allocation of Rs. 32.33 crore in favour of Himachal Pradesh under Normal RKVY for the year 2016-2017 which would be shared on 90:10 basis by Centre & State.

Keeping in view the interim allocation received from Govt. of India, the meeting of State Level Sanctioning Committee (SLSC) to approve the RKVY projects under Production Growth and Infrastructure & Assets stream for the year 2016-2017 has already been convened on 20th August, 2016. The Stakeholder-wise detail projects / funds approved is as under:

(Rs.in lakh)			
S.No.	Department	Projects approved	Funds approved as per availability
1.	Agriculture	3079.39	1674.15
2.	Horticulture	1023.03825	497.85
3.	Animal Husbandry	2198.85	886.00
4.	Fisheries	150.00	100.00
5.	Industries	150.00	75.00
	Total	6601.27825	3233.00

7. NATIONAL FOOD SECURITY MISSION (NFSM) :

The National Food Security Mission is a centrally sponsored scheme has been launched in 2007. Government of India has allocated funds to the tune of Rs 17.77 crores during 2016-17 for rice, maize, pulses and wheat crop. Himachal Pradesh has been included under this Mission to increase the production and productivity of Wheat, Maize, pulses and Rice. Under this Mission, 11 Districts in Wheat Except Shimla, two Districts Kangra & Mandi under Rice & 9 districts except Shimla, Kinnaur & Lahul Spiti under Maize & all Districts have been selected in the State for pulses. The Mission provides assistance for laying cluster demonstrations, distribution of Certified Seed, Micro-Nutrients, Plant and soil protection material, liming of acidic soils, improved implements and machinery, introduction of IPM, INM and capacity building of the farmers. Besides this assistance would be available for water harvesting, Micro irrigation & pumping sets. A sum of ₹1.36 crore have been approved for NFSM Rice & ₹8.89 crore for NFSM Wheat and ₹3.19 crore for NFSM Maize & ₹4.32 crore for NFSM Pulses for the year 2016-2017. The Mission would be very helpful in increasing the productivity level of Rice, Maize, Pulses and Wheat. For smooth implementation of the Mission in the Districts the District level NFSM Executive Committees have also been constituted in all the districts.

Objectives of this scheme:

- a. Increasing production of rice and pulses through area expansion and productivity enhancement in a sustainable manner in a identified district of the State.
- b. Restoring soil fertility and productivity at the individual farm level.
- c. Creation of employment opportunities.
- d. Enhancing farm level economy i.e. farm profits to restore the confidence among the farmers.

8. ORGANIC FARMING

The State has diverse agro-climate conditions and due to its favourable positioning in the Himalayan region, has great scope for promotion of Organic farming. The use of chemical fertilizers and pesticides in the State is very low and 80% of the area is rainfed. The State Government formulated a Policy on Organic Farming in 2010 and has covered 39440 farmers with an area of 21,656 ha under Organic farming. During current financial year 260 hectare additional area is being covered under organic farming. During current financial year 6500 Vermi-Compost Units with 50 per cent assistance will be set up.

Organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. Its emphasis is on the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible, cultural, biological and mechanical methods, as opposed to using synthetic material, to fulfill any specific function within the system. The State of Himachal Pradesh has started taking steady strides towards the promotion of organic farming. There is an increasing awareness about organic agriculture practices in the state. Besides, most of the remote and inaccessible areas are still continuing with the traditional methods of crop production using organic manures as the only source of the nutrients.

It includes all the agricultural production systems that promote environmentally, socially and economically sound production of food and fibers. In this system soil fertility is the key to successful production. Organic farming aims to optimize quality in all aspects of agriculture by taking into consideration the natural capacity of plants, animals and the land. It emphasizes on the health of agricultural ecosystem and prohibits the use of synthetic herbicides and pesticides, genetically modified organisms, synthetic fertilizers in crop production and hormones and antibiotics in livestock production. It respects the law of nature to increase yields and disease resistance. Organic farming requires a high level of farm management skills and require use of wide variety of resources to solve the problems. The organic farming focuses on;

- Maximize biological activity in soils
- Maintain long term soil health and minimize soil erosion
- Enhance the genetic and biological system and its surroundings
- Provide livestock with optimal living conditions for well being and better health
- Recycling of materials of plant and animal origins, nutrients to the land (soil and minimize the use of non renewable resources
- Promotion of environmentally friendly use of soil, water and air thus minimizing agricultural pollution

Fertility management in different types of soils is very crucial and critical to increase the productivity under organic farming. Fertility management encompasses application and addition of nutrients supplying materials, which include chemical fertilizers, organic manures and other ameliorants. Efficacy of added materials depends on several factors like structure of soil, drainage and tilth etc. It has been found that continuous use of chemical fertilizers has lead to several problems in hill soils i.e. reduction in pH, deficiency of secondary and micro nutrients and reduced biological activity. It is tradition in hills to add organic manures in the soils which also supplement nutrition and also improves physical and biological properties of soils. Practice of incorporation of organic manure is very good, but farmers usually add partially decomposed biomass, which account for immobilization of available nutrients in soil particularly Nitrogen and also it is the chief source of insects attack, fungal and weed infestation.

The most challenging time in the organic farming system is the transition phase as the farmer switch from conventional to organic agriculture. During the early stages of conversion, drop in yields up to 30 % have been reported by farmers who were dependent on herbicides, fertilizers and pesticides and it takes about decade for their yields to recover. But some farmers observed that the yields rebound within just a few years as they were using only minimum inputs. The yields tend to increase with the number of years under organic management as farmers gain experience and soil improves. It has also been reported that organic farms have higher yields than conventional farms under stress caused by drought, heat, excessive rainfall or unreasonably cold weather.

Organic farming tends to have lower cost of production than conventional farming, as less emphasis on purchased inputs. Similarly, the net income from organic farming appears to be slightly higher than the conventional farming. In general, the expenses are lower and the income is higher (due to price premium).

Keeping in view importance and scope of Organic Farming, the Government has already notified the policy for its adoption and fulfillment of need based organic farming policy objectives. The present project proposal is prepared in consideration of the organic farming policy document of Himachal Pradesh giving thrust to some of the strategies to be adopted viz, Govt. support to organic sector, support to organic farmers, the incentive schemes for the farmers and strategy for awareness raising. The main features of organic policy are as under;

1. Incorporation of organic into agriculture development.
2. Awareness raising.
3. Research and Technology support.
4. Strengthening Organic Extension services support.
5. Organic quality assurance.
6. Meeting organic input requirement.
7. Supply chain and marketing.
8. Identifying Niche Areas for organic farming and converting institutional farms etc.

Justification/Objectives:

- To promote the policy relating to adoption of Organic Farming
- Promotion of environment friendly agriculture
- Recycling & use of farm waste biomass, thereby reducing the cost of production
- To improve the physical and biological properties of soils, shelf life and flavour of farm produce
- To reduce the use of inorganic fertilizers
- To increase export of farm produce
- Improvement of soil health

ONGOING PROGRAMMES:-

1. . Paramparagat Krishi Vikas Yojna

Project cost	Rs. 1415.34 lac
Area	2460 Hectare (10 Districts)
No. of Organic Villages	213
Implementation Agency	Department of Agriculture
Certification	Participatory Guarantee System

2. Organic Project Through Organic Villages

Project cost	Rs. 3165 lac
Area	4200 Hectare (All Districts)
Implementation Agency	Department of Agriculture through Service Providers
Certification	Third Party

3. Rashtriya Krishi Vikas Yojana- Promotion of organic farming

Assistance for organic certification through cluster approach for 3years	@ Rs.10,000/- per hectare
Assistance for construction of vermicompost units/HDPE Portable Unit	@ Rs.5000 per unit
Assistance for Area Expansion under organic farming	@ Rs.10000/-per hectare

ACHIEVEMENT OF ORGANIC FARMING IN THE STATE:

Sr. No.	Particulars	Unit	Achievement
1	Farmers registered under organic farming	No's	39,440
	Certified	No's	10085
	Under conversion	No's	29355

2	Area under organic farming	ha.	21656
3	Vermiculture hatcheries	No's	20
4	Vermicompost unit—Permanent units with farmers Commercial units	No's	1,36,203
		No's	28
5	Bio-fertilizer production unit	No's	4
6	Bio-control Labs	No's	4
7	Fair	No's	2
8	Distribution of literature		
	1) Adhunik Kheti Me Jaiv Urvarkon (Bio- fertilizers) Ka Mahtav Aur istemal	No's	15,000
	2) Jaivik Krishi Ke Rashtriya Manak	No's	50,000
	3) Kenchua Khad-Bhoomi Ke Upjaupan Ke Liye Vardan	No's	50,000
	4) Kenchua Khad	No's	20,000
	5) Jaivik Kheti	No's	20,000
	6) Organic farming	No's	6,000
	7) Potash mobilising bacteria	No's	439
	8) Bio- treated seeds	No's	600
	9) NPK-liquid bio-fertilizers	No's	336
	10) Bio-control agents and bio-pesticides	No's	502
	11) Jaivik Kheti	No's	4,000
	12) Jaivik Kheti Neeti	No's	4,000
	13) HP Organic Policy Hindi/English	No's	1,000
14) Jaivik Kheti Prakriya	No's	2,000	

9. NATIONAL MISSION ON SUSTAINABLE AGRICULTURE (NMSA 90:10):

Sustaining agricultural productivity depends on quality and availability of natural resources like soil and water. Agricultural growth can be sustained by promoting conservation and sustainable use of these scarce natural resources through appropriate location specific measures. Indian agriculture remains predominantly rainfed covering about 60% of the country's net sown area and accounts for 40% of the total food production. Thus, conservation of natural resources in conjunction with development of rainfed agriculture holds the key to meet burgeoning demands for foodgrain in the country. Towards this end, National Mission for Sustainable Agriculture (NMSA) has been formulated for enhancing agricultural productivity especially in rainfed areas focusing on integrated farming, water use efficiency, soil health management and synergizing resource conservation. NMSA will cater to key dimensions of 'Water use efficiency', 'Nutrient Management' and 'Livelihood diversification' through adoption of sustainable development pathway by progressively shifting to environmental friendly technologies, adoption of energy efficient equipments, conservation of natural resources, integrated farming, etc. Besides, NMSA aims at promoting location specific improved agronomic practices through soil health management, enhanced water use efficiency, judicious use of chemicals, crop diversification, progressive adoption of crop-livestock farming systems and integrated approaches like crop-sericulture, agro-forestry, fish farming, etc.

NMSA will have following objectives:

1. To make agriculture more productive, sustainable, remunerative and climate resilient by promoting location specific Integrated/Composite Farming Systems;
2. To conserve natural resources through appropriate soil and moisture conservation measures;
3. To adopt comprehensive soil health management practices based on soil fertility maps, soil test based application of macro & micro nutrients, judicious use of fertilizers etc.;
4. To optimize utilization of water resources through efficient water management to expand coverage for achieving '*more crop per drop*';
5. To develop capacity of farmers & stakeholders, in conjunction with other on-going Missions e.g. National Mission on Agriculture Extension & Technology, National Food Security Mission, National Initiative for

Climate Resilient Agriculture (NICRA) etc., in the domain of climate change adaptation and mitigation measures;

6. To pilot models in select blocks for improving productivity of rainfed farming by mainstreaming rainfed technologies refined through NICRA and by leveraging resources from other schemes/Missions like Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Integrated Watershed Management Programme (IWMP), RKVY etc.; and
7. To establish an effective inter and intra Departmental/Ministerial co-ordination for accomplishing key deliverables of National Mission for Sustainable Agriculture under the aegis of NAPCC.

NMSA has following four (4) major programme components or activities:

(i) Rainfed Area Development (RAD):

RAD will adopt an area based approach for development and conservation of natural resources along with farming systems. This component has been formulated in a 'watershed plus framework', i.e., to explore potential utilization of natural resources base/assets available/created through watershed development and soil conservation activities /interventions under MGNREGS, NWDPR, RVP&FPR, RKVY, IWMP etc.. This component will introduce appropriate farming systems by integrating multiple components of agriculture such as crops, horticulture, livestock, fishery, forestry with agro based income generating activities and value addition. Besides, soil test/soil health card based nutrient management practices, farmland development, resource conservation and crop selection conducive to local agro climatic condition will also be promoted under this component. A cluster based approach of 100 hectare or more (contiguous or non contiguous in difficult terrain with close proximity in a village/adjoining villages) may be adopted to derive noticeable impact of convergence and encourage local participation and for future replication of the model in larger areas. Supplementary support from this component will be admissible for gap-filling resource conservation activities under converging programmes. RAD clusters should have soil analysis/soil health card/soil survey maps to justify the interventions proposed and at least 25% of the farming system area will have to be covered under On Farm Water Management. Farming Systems recommended by ICAR's Contingency Plans and successful findings of NICRA projects shall also be considered in development of integrated project plan. Besides, creation and development of common property resources/assets/utilities like grain bank, biomass shredders, fodder bank, group marketing etc. will be encouraged under this component. Government of India has approved the work plan of 8.50 Crore and allocated funds to the tune of Rs.7.00 Crore as Central share on funding pattern of 90:10 basis (90% Central Share & 10% State share) for executing RAD activities in 30 clusters during 2016-2017 under this component.

(ii) Soil Health Management (SHM):

SHM will aim at promoting location as well as crop specific sustainable soil health management including residue management, organic farming practices by way of creating and linking soil fertility maps with macro-micro nutrient management, appropriate land use based on land capability, judicious application of fertilizers and minimizing the soil erosion/degradation. Assistance will be provided for various improved package of practices based on land use and soil characteristics, generated through geographical information system (GIS) based thematic maps and database on land and soil characteristics through extensive field level scientific surveys. Besides, this component will also provide support to reclamation of problem soils (acid/alkaline/saline). This component will be implemented by State Govt., National Centre of Organic Farming (NCOF), Central Fertilizer Quality Control & Training Institute (CFQC&TI) and Soil and Land Use Survey of India (SLUSI). Given the limitations, such as staff and infrastructure, faced by the department of agriculture at the field level, a Public Private Partnership Model may be adopted by states depending upon the private partner's strength in the field to ensure that the soil testing is done in time and in the numbers required. The private parties can be encouraged to set up soil testing labs in selected areas in the district. The Govt. of India has launched new scheme based on which the sample of soil shall be drawn on GPS basis and total 69,635 samples would be analyzed this year. The GOI conveyed the approval of Rs. 241.62 lakh under NMSA for Soil Health Management component on 90:10 pattern.

(ii) Soil Health Card Scheme:

- (i) The Hon'ble Prime Minister of India has launched the 'Soil Health Cards Scheme' on 19th February, 2015 in the country with an objective to address the nutrient deficiency in fertilizer practices; to strengthen functioning of soil testing labs through capacity building and linkage with ICAR/SAU; to diagnose soil fertility related constraints

with standardized procedures for sampling uniformly across the states and analyze and design Taluka/Block level fertilizer recommendations in the targeted districts; to develop and promote soil test based nutrient management in the districts for enhancing nutrient use efficiency and to build capacities of the district/ state level staff and progressive farmers for promotion of nutrient management practice.

- (ii) As per annual action plan approved by the Govt. of India for soil health cards scheme, net sown area of 5,48,000 ha shall be covered and about 69635 soil samples (55708 for irrigated area and 13927 from rainfed area) shall be drawn with GPS system.
- (iii) The samples be drawn grid wise covering an area of 2.5 ha for irrigated and 10 ha for rainfed area in 2 months after harvesting of crop but there may be some relaxation in area of 5-6 ha being a hilly state and undulating topography.
- (iv) The soil health cards shall be issued to all the farmers of the selected grid covering operational holdings of 9.61 lakh on line as well as manually.
- (v) Keeping in view the capacity and infrastructure of soil testing available in the our state, the target allocated to the state under soil health cards scheme should be covered in **one year instead of 3 years**.
- (vi) GPS based 27854 soil samples be drawn and analyzed in Kharif, 2015 season and 41781 in Rabi 2015-16 season. Soil health cards shall be made available to all farmers of the state alongwith nutrient recommendation for the crops to be grown in Kharif and Rabi seasons by the farmers.
- (vii) Action plan has been prepared to complete the drawl, analysis and issuance of SHC in the state to all farming families within one year and instructions have been issued to the field functionaries.
- (viii) Govt. of India released funds to the tune of Rs 24.08 lakh as central share on 75:25 basis with state share of Rs 8.02 lakh to implement the scheme in 2014-15. During 2015-2016, a programme of 129.64 lakh was implemented on 90:10 basis for which state Govt. provided Rs.82.30 lakh and Centre Govt. Rs 47.34 lakh to cover the entire target of 69635 samples (having liability Rs.69.34 lakh). During 2016-2017, against the AAP of Rs108.93 lakh (Central Share of Rs 104.98 (including Rs.69.34 lakh liability) and state Share of Rs 3.95 Lakh was submitted. Govt. of India released 28.05 Lakh (Rs 23.35 lakh (General) and Rs 4.70lakh (SC) on 50:50 basis instead of 90:10 pattern of assistance.
- (ix) SHC scheme is being implemented in the state as a campaign mode involving all the department staff including extension functionaries and ATMA's Staff. Awareness camps were organized to sensitize the farming community about the SHC scheme. Timely arrangements were made for imparting training, immediately providing items like internet facility in all 11 Static soil Testing labs, 110 GPS instruments for sample collection, Chemicals, glassware, analytical instruments, glossy papers and 11 colored printers for generation of Soil Health cards etc.
- (x) The farmers are coming forward to adopt SHC scheme, promote judicious use of plant nutrients and INM technology. The productivity of selected crops is increasing significantly and success stories are being prepared to Sensitize the farming community.
- (xi) The progress of the scheme is being reviewed district wise on weekly basis through weekly video conferences and through web based Soil Health Card portal by GOI. In Himachal Pradesh, 73402 samples were drawn, 72312 analysed and 2,69,451 soil health cards issued to the farmers (up to 12th September, 2016). As per the action plan, SHC shall be made available to all the farming families during 2016-2017.
- (xii) Being a national flagship program and evaluating the progress of the SHC scheme, **the** Hon'ble Prime Minister has awarded the "First prize to Hamirpur district of Himachal Pradesh in SHC scheme in the Country (Rs 10.00 Lakh) on civil services day i.e. 21st April, 2016

(iv)Paramparagat Krishi Vikas Yojna

Our state is bestowed with the potential of organic farming due to its huge natural resource , biodiversity , varied and rain fed agro climatic conditions. To promote organic farming, Govt. of India has recently launched a new scheme Paramparagat Krishi Vikas Yojna under National Mission on Sustainable Agriculture for adoption of organic villages & PGS certification by mobilising farmers in cluster mode to enable them to certify their own organic products. Under the scheme participatory guarantee system of certification will be followed in place of costly third party certification system. Govt. of India has approved Rs. 646.82 lakh on 90:10 basis for 2016-17. Project is for three year. Total 123 clusters of 50 acre (20 hac.) each have been selected and farmers are being trained in organic farming and PGS system of certification.

10. PARDHANMANTRI KRISHI SINCHAI YOJANA:

In an attempt to improve the Agricultural productivity, the government of India has started a new scheme, the Pradhan Mantri Krishi Sinchai Yojana (PMKSY). Micro-irrigation projects ("Har Khet Ko Pani") and end-to-end irrigation solutions will be the key focus of this scheme. "The major objective of the PMKSY is to achieve convergence of investments in irrigation at the field level, expand cultivable area under assured irrigation, improve on-farm water use efficiency to reduce wastage of water, enhance adoption of precision-irrigation and other water-saving technologies". Water conservation and cutting down on wastage is key to bringing irrigation facilities to every farm in the country. This makes introduction of sustainable water preservation practices and optimisation of water resources (More Crop Per Drop) just as important as introduction of new irrigation facilities. For implementation of PMKSY interventions, Govt. of India has made mandatory to access the funds if District Irrigation Plans and State Irrigation Plan for PMKSY are prepared. Department has prepared 12 District Irrigation Plans and uploaded on PMKSY portal after duly approved by State Level Sanctioning Committee (SLSC). The State Level Sanctioning Committee (SLSC) of PMKSY has sanctioned following Department & component wise projects amounting to Rs.500.15 crore.

S.No.	Department	PMKSY Component	No. of Scheme	Annual Action Plan approved by SLSC for 2016-17 (Rs. in Lakh)	Physical Targets for 2016-17 (Ha.)
1	Irrigation & Public Health	AIBP	6	55.16	700.00
		Har Khet Ko Pani	118	125.00	2500.00
		-do- CAD&WM	28	55.00	2500.00
Total			152	Rs. 235.16crore	5700.00
2.	Department of Horticulture	Per Drop More Crop -Micro-Irrigation	1195	4.01	357.00
3	Department of Agriculture	Per Drop More Crop -Other Interventions	18250	32.70	4313.00
4.	Rural Development	PMKSY- Watershed	80	230.61	51346Cum
Grand Total			19677	500.15	

Govt. of India has made tentative allocations of Rs. 16.00 crore for execution of Per Drop More Crop-Other Interventions component for 2016-2017 in respect of Department of Agriculture.

11. National e-Governance Plan -Agriculture [NeGP-A]:

Government of India has started a centrally sponsored scheme [CSS] "National e-Governance Plan - Agriculture [NeGP-A] in Department of Agriculture and Co-operation with outlay of **Rs. 227.79 Crores**. In first phase, the scheme is being implemented in 7 states including HP. Department of IT, has been appointed as a nodal agency for the implementation of [NeGP-A] in HP and funds to the tune of **Rs. 1.98 Crore** has been released directly to "Society for promotion of IT & e-governance (SITEG), HP" an autonomous body up to 31st March, 2016. The project was declared as operational with effect from 28th October 2014 and is now under operational & maintenance phase in the pilot States. It is now being rolled out in the remaining 22 States and 07 UTs.

The vision behind the project is to create an environment conducive for raising farm productivity and income to global levels through provision of relevant information and services to stakeholders. Various IT initiatives/schemes undertaken or implemented by DAC which are aimed at providing information to the farmers on various

activities in agriculture value chain, will be integrated, so that farmers are able to make proper and timely use of available information. The information is intended to be provided to farmers through various channels including common service centres, internet kiosks and SMSs. 12 clusters of services have been identified.

Sr. No.	Name of Services
1	Information on Pesticides, Fertilisers and Seeds
2	Providing Information on Soil health
3	Information on Crops, farm machinery, Training and Good Agricultural practices (GAPs)
4	Information on Forecasted Weather
5	Information prices, arrivals, procurement points and providing interaction platform
6	Electronic Certification for Exports and Imports
7	Information on marketing infrastructure
8	Monitoring implementation / Evaluation of Schemes & programs
9	Information on Fishery Inputs
10	Information on irrigation infrastructure
11	Drought Relief and Management
12	Livestock Management

State Government has constituted one State Empowered Committee and 12 District NeGP-A Implementation Teams for the implementation of this plan and fixed the roles and responsibilities of committees. 36 sub Services / applications have been rolled out by the Ministry of Agriculture, Govt. of India under NeGP-A Project.

12. Web Portals and Mobile apps used by the Farmers :

The Department of Agriculture, Himachal Pradesh is committed to provide the useful information / advisories to the farmers of State through organisations of camps / Seminars / Melas / Conferences as well as use of information Technology. Dissemination of information to the farmers through web portals as well as on their mobiles is one of the major and useful components to improve the farm income and providing advisory in a very short period of time. Government has developed Web portals as well as Mobile apps by which farmer are receiving advisories as well as getting information from these mobiles apps as per their need / requirement. Some of these are:

(i) Farmer Portal:

It is envisaged to make available relevant information and services to the farming community and private sector through the use of information and communication technology. Farmers' Portal is an endeavor in this direction to create one stop shop for meeting all informational needs relating to Agriculture, Animal Husbandry, Horticulture and Fisheries sectors. In the Farmers' Portal, farmers are getting all relevant information on specific subjects around his village/block / district or state. One can access the portal on www.farmer.gov.in.

(ii) M-Kisan SMS Portal:

Kisan SMS Portal for Farmers has been created by the Ministry of Agriculture, Government of India. The portal is for disseminating relevant information, giving advisories such as seasonal management directives type, intimation about organisation of camps, crops activities etc. through SMSs to the farmers of the state by the registered officers of the Department. At present, at State level, State Nodal officer & at District level Deputy Director, Agriculture & Project Director (ATMA) as well as officers at block level are registered under this portal for sending advisories to the farmers in respect of Department of Agriculture, Himachal Pradesh. Simultaneously various officers are also registered under this portal in respect of Department of Animal Husbandry, Horticulture as well as Fisheries Departments for sending advisories to the farmers. This portal is available at www.mkisan.gov.in.

(iii) Kisan Suvidha Mobile App:

This mobile app developed by the Ministry of Agriculture, Government of India to help farmers by providing relevant information to them quickly. Kisan Suvidha has a simple interface and provides information on five critical parameters-weather, input dealers, market price, plant protection and expert advisories. An additional tab directly

connects the farmer with the Kissan Call Centre where agriculture experts answer their queries. Unique feature like extreme weather alerts and market prices of commodity in nearest area and the maximum price in state as well as India have been added to empower farmers in the best possible manner. With click of a button, farmers can get all this information in hand provided they have a smart phone and decent internet connectivity. This app can be downloaded from Google play store and on mkisan- Mobile Apps section (mkisan.gov.in).

(iv) PUSA Krishi App:

This Mobile app developed by the Ministry of Agriculture, Government of India to help the farmers to find easy solution to the problems in their farm fields. The app will provide farmers with information related to new varieties of crops developed by Indian Council of Agriculture Research (ICAR), cultivation practices as well as farms machinery etc. This app can be downloaded from Google play store and on mkisan- Mobile Apps section (mkisan.gov.in).

(v) Crop Insurance App:

This Mobile app developed by the Ministry of Agriculture, Government of India to help the farmers about crop insurance. This app can be downloaded from Google play store and on mkisan- Mobile Apps section (mkisan.gov.in).

(vi) Agrimarket App:

This Mobile app developed by the Ministry of Agriculture, Government of India to help the farmers about available nearby market rates of the commodity in the respective states. This app can be downloaded from Google play store and on mkisan- Mobile Apps section (mkisan.gov.in).

(vii) Pilot Project on improvement of Services to Farmers through Mobile Technology:

Department of Agriculture Himachal Pradesh has developed a Mobile based application under the Project "Launch of Pilot on Improvement of Services" under "State Collaboration Initiative Programme" approved by the Ministry of Administrative Reforms, Grievances and Pensions, GOI New Delhi. It provides information on about 25 crops related to diagnosis of diseases, insect pests and stress symptoms in different crops and also provides advisory services and remedial measures to the farmers as per the approved package of practices. This mobile app is available at www.agrimobile.hp.gov.in.