

PROGRAMMES AND SCHEMES (SCHEMATIC DESCRIPTION):

(I) STATE PLAN SCHEMES:

1. Quality Seed Multiplication and Distribution:

Department owns 20 Seed Multiplication Farms, 3 Vegetable Development Stations, 1 Ginger Development Station & 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.

LIST OF SEED MULTIPLICATION FARMS, VEGETABLE DEVELOPMENT STATION, GINGER DEVELOPMENT STATION AND POTATO DEVELOPMENT STATIONS

Sr. No.	Name of Farm	District	Total Area (ha.)	Cultivated Area (ha.)	Irrigated Area (ha.)
1	SMF, Deoth	Bilaspur	6.80	3.296	3.296
2	SMF, Auhar	Bilaspur	6.49	4.41	4.41
3	SMF, Haripura	Chamba	1.343	0.492	0
4	SMF, Thulel	Chamba	2.45	2.42	2.20
5	SMF, Milwan	Kangra	49.50	27.50	17.50
6	SMF, Shahpur	Kangra	14.38	12.04	2.83
7	SMF, Bhadiakhar	Kangra	14.00	7.20	7.20
8	SMF, Paprola	Kangra	8.42	6.74	6.74
9	SMF, Kalpa	Kinnaur	2.90	1.80	1.80
10	SMF, Karsog	Mandi	7.51	6.20	6.20
11	SMF, Guderl	Mandi	8.81	5.42	3.98
12	SMF, Moviseri	Mandi	7.27	4.70	0
13	SMF, Jogindernagar	Mandi	7.77	4.90	4.90
14	SMF, Chhattar	Mandi	4.60	3.20	2.80
15	SMF, Kheri	Sirmour	15.70	14.63	14.63
16	SMF, Bhagani	Sirmour	13.72	11.20	10.80
17	SMF, Bubi	Sirmour	8.80	4.20	3.00
18	SMF, Manjholi	Solan	10.00	9.10	9.10
19	SMF, Kunihar	Solan	7.20	5.10	0
20	SMF, Pekhubella	Una	131.27	23.65	20.35
1	VDS, Bhantoon	Kangra	4.35	3.36	3.36
2	VDS, Bairtee	Solan	4.00	2.00	2.00
	VDS, Boach	Solan	0.616	0.616	0.616
3	VDS, Chambaghat	Solan	0.56	0.48	0
1	GDS, Harloo	Sirmour	8.00	3.55	3.40
1	PDS, Ahla	Chamba	8.58	3.33	0
2	PDS, Rajgundha	Kangra	3.20	2.79	0
3	PDS, Khunna	Kullu	3.34	2.84	0
4	PDS, Dalang Maidan	L/Spiti	5.28	4.80	4.80
5	PDS, Kamrah	Mandi	3.94	2.32	0
6	PDS, Phuladhar	Mandi	14.24	7.772	0
7	PDS, Kharapathar	Shimla	15.80	6.20	0
8	PDS, Dhurla	Shimla	14.94	6.80	0

9	PDS, Khadrula	Shimla	6.25	5.50	0
10	PDS, Umladwar	Shimla	12.50	3.50	0
11	PDS, Thianbag	Sirmour	14.80	5.63	2.00
12	PDS, Kheradhar	Sirmour	12.80	5.87	2.00

2. MANURE AND FERTILIZERS:

I) DISTRIBUTION OF FERTILIZERS:

The State Government has allowed cost subsidy on complex fertilizers DAP 18:46:00, IFFICO- NPK 12:32:16 & 10:26:26, RCF- NPK 15:15:15 @ Rs.1000/-per MT. Apart from this, cost subsidy @25% is also being provided on 100% water soluble complex fertilizers NPK 18:18:18, IPL-NPK 19:19:19, RCF-NPK 19:19:19 , IFFICO- Urea Sulphate, Sulphate of Potash 0:0:50 to the farmers (limited to Rs. 2500 per farmer). Government from this year has also decided to allowed 25 % subsidy on organic fertilisers. 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 nine mobile soil testing labs & 47 mini 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 50,000 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, pesticides are being 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.

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 16.50 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 700 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 2008-09 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 2011-12 of Rs. 8.20 crores was made in annual plan 2012-13, 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 was 7 years i.e. 2011 to March, 2018 but now it will be implemented up to 2020 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

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 (2014-15 TO 2018-19)

Sr.No.	Component	No's	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. This year Rs. 23.00 crores are being spent under this scheme. Government has also raised the limit of covered area for subsidy from existing 2000 square meter to 4000 square meter.

13.EFFICIENT IRRIGATION THROUGH 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 a scheme named "Efficient irrigation through micro- irrigation system" with an outlay of Rs.154 Crore over a period of 4 years. Through this Project, 8,500 hectare area will be brought under Drip/ Sprinkler Irrigation System benefitting 14,000 farmers. This year Rs. 15.00 crores are being spent under this scheme covering an area of 1264 hectare. Under this scheme, assistance of 80 % is being provided. During last year Rs. 10.00 crores were spent covering an area of 902 Hectare.

14.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 area 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. 8.00 Crore has been kept for 2018-19. During last year Rs.7.00 crores were spent on this scheme. The State Government will encourage cultivation of Azola Grass among the farmers. The Government has proposed to provide 50 per cent assistance for the preparation of Pit.

15.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 2015-16. In case of the death and permanent disability, a compensation of Rs. 1.5 Lakh & 50,000 and in case of partial disabilities, compensation up to Rs. 10,000 to 40,000 will be provided to the affected. A provision of Rs. 40 lakh has been kept for 2018-19. Till date, Rs. 17.20 lakhs have been given to 53 farmers as a compensation under this scheme.

16. 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. A provision of Rs. 10 Crore has been kept for 2018-19.

17.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. 49 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.

18. 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 17500 coffee plants on farmer fields in Bilaspur, Mandi, Kangra & Una Districts. The seed for this is made available from Central Research Institute Chikmagalur. During the year 2015, 25440 plants have been raised in the Departmental nursery for distribution to the farmers viz. Kangra 4960, Mandi 7320, Bilaspur 7700, Hamirpur 3160 & Una 2300. During the year 2016, 3550 plants & during 2017-18, 16595 plants have been raised in the Departmental nursery for distribution to the farmers.

19. 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 scheme "Mukhya Mantri Khet Sanrakshan Yojna". Under this scheme, a subsidy of 85% will be provided if three or more farmers are opted to install solar fencing and if farmer opted to install solar fencing on individual land then 80% subsidy will be provided. The fence will be energized with the help of solar power. 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. 35.00 Crore has been kept for 2018-19 and about 1800 hectares cultivated land shall be fenced and protected from wild/ stray animals and monkey menace under this scheme. During last year, seven different models of different parameters were approved for assistance. But, due to undulating topography, zig-zag shape of farms, there is always possibility of increasing numbers of corners poles and other accessories, sometimes the cost per running meter as per actual work done on prevailing site need and requirements increase more than 10% which causes conflicts between farmers & department at the time of measurements. Therefore, in view of conflicts in mind it was decided in consultation with field officers such as Deputy Directors of Agriculture (DNOs) & Subject Matter Specialists (PIAs) by the evaluation committee constituted for empanelment of service providers, the payment may be made on actual work done basis, for which department has approved the components wise rates.

20. MUKHYA MANTRI GREEN HOUSE RENOVATION SCHEME:

Farmers of the state have demanded that there should be a scheme to replace the Poly sheets. Therefore, the Government of Himachal Pradesh has introduced a new scheme **Mukhya Mantri Green House Renovation Scheme**. Under this scheme, from this year the assistance has been increased from 50% to 70 % to the farmers for the replacement of poly sheet after 5 years of setting up of polyhouse or damage due to natural calamities. A budget provision of 3.0 crore has been kept for the year 2018-19 which has been allocated to Deputy Directors / District Agriculture Officers in all districts.

21. STATE AGRICULTURAL MECHANISATION:

Under Farm mechanization, the newly developed equipments and modern machinery are being introduced in the farmers of the State. The Department is going to make available Tractors and Power tillers on subsidy to the farmers. During this year, Tractors 8-20HP on 50 % subsidy with a maximum limit of Rs. 2.25 Lakh, Tractors 20-40HP on 50 % subsidy with a maximum limit of Rs. 3.00 Lakh, Tractors 40-70HP on 50 % subsidy with a maximum limit of Rs. 5.00 Lakh and Power Tillers upto 8HP on 50 % subsidy with a maximum limit of Rs. 65,000, Power Tillers above 8HP on 50 % subsidy with a maximum limit of Rs. 85,000 and Power weeder on 50 % subsidy with a maximum limit of Rs. 25,000 are being provided to the farmers. State Government from this year will also encourage establishment of Agriculture requirement hiring centers from where farmers/ Horticulturists can get implements on hire basis. A subsidy at the rate of 40 % upto Rs. 25.00 Lakh on machinery will be provided to

Himachali Farmers and young entrepreneurs for establishment of such centers. A provision of Rs.20.00 crore has been kept for this year mechanization.

22. SAUR SINCHAYEE YOJNA

Solar energy is a renewable energy, alternate source of energy and has a huge potential, which can cater to most of the critical needs of farm operations. It is not only cheap, but also eco-friendly. Solar energy is a an uninterrupted source and all the energy stored in the Earth's reserves like coal, oil and natural gas is equal to the energy in just 20 days of sunshine. State Government has introduced a new scheme viz,"**SAUR SINCHAYEE YOJNA**" with a view to provide assured irrigation to crops, enhance the production & productivity where electricity accessibility in remote areas is costly in comparison to Solar PV pumps. Under this scheme, 90 % assistance will be provided to small / marginal farmers for the installation of solar pumping machinery on individual basis. 80 % assistance will be provided to medium / big farmers for the installation of solar pumping machinery on individual basis. 100 % assistance will be provided, if minimum 5 farmers opted for installation of solar pumping machinery on community basis. The provision for installation of 1 HP to 10 HP solar pumps has been kept under this scheme. Under this scheme, 5850 agriculture solar pumping sets will be made available to the farmers. The total outlay for this scheme is Rs. 200 Crores for next Five years. A budget provision to the tune of Rs. 30.00 crore has been kept for this year.

23. PRAKRITIK KHETI KHUSHAL KISAN YOJNA UNDER ZERO BUDGET NATURAL FARMING:

State Government to encourage the Zero Budget Natural Farming in the State has launched new scheme "Prakritik Kheti Khushal Kisan Yojna".Government intends to encourage "**Zero Budget Natural Farming**", so as to bring down the cost of cultivation. The following action will be taken to promote organic and zero budget natural farming in the state:

- ✓ Farmers and extension staff of Agriculture, Horticulture and Animal Husbandry Departments will be trained in this farming. Awareness campaign will be launched.
- ✓ Package of practice will be developed by the Universities.
- ✓ The use of chemical fertilizers and chemical fertilizers and chemical pesticides will be discouraged.
- ✓ The budget provided for pesticides/ insecticides to the department of Agriculture and Horticulture will be used for providing bio-pesticides and bio-insecticides.
- ✓ Policy will be framed and implemented for promotion of '**Desi cow**'.
- ✓ 80 % assistance would be provided for lining of cattle sheds which would facilitate collection of cow dung and urine.
- ✓ 75 % assistance for providing drums to the farmers.
- ✓ One farmer in each village would be incentivized to open one shop for supply of ZBNF inputs at nominal rate. One time assistance of Rs.50, 000 per shop over 3 years would be provided.
- ✓ Farmers would be provided training & necessary equipment's. A budget provision of Rupees 25 crore has been kept for 2018-19.

24. JAL SE KRISHI KO BAL YOJNA:

With a view to provide water for irrigation, Government has launched a new scheme "जल से कृषि को बल". Under this scheme check dams and ponds will be constructed. Farmers can use this water for irrigation purpose after construction of small lifting schemes or Flow Irrigation schemes on individual basis. The total outlay for this scheme is Rs. 250 Crores for next Five years. A budget provision of Rs. 40 crore has been kept for this. Under this scheme, 100 % expenditure would be borne by the Government for implementation of community based small water saving scheme.

25. FLOW IRRIGATION SCHEME:

Under this scheme, besides renovating the source location of Kuhl, strengthening of Kuhl in common area will be undertaken. The total outlay for this scheme is Rs. 150 Crores for next Five years. A budget provision of Rs. 25 crore has been kept during this year. Under this scheme, 100 % expenditure would be borne by the Government on community based work. Under this scheme 7152.30 hectare area will be brought under assured irrigation benefitting 9580 farmers of the state. Government has decided to grant 50 per cent subsidy for construction of Bore-Wells & shallow wells by individual for irrigation purposes under this scheme.

(II) CENTRALLY SPONSORED SCHEMES:

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

In 12th 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 and Plant Quarantine (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 2018-19, work plan amounting to Rs 2225.87 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 948.52 lakhs have been allocated as central share. With matching state share amounting to Rs 105.39 lakhs, total funds available for 2018-19 are Rs 1053.91 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 2018-19, work plan amounting to Rs 573.00 lakhs has been approved by GOI on 90:10 sharing basis. Funds amounting to Rs 515.70 lakhs have been allocated by GOI as central share. Total funds available for 2018-19 are Rs 573.00 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 2018-19, workplan amounting to Rs 1625.00 lakhs has been approved and funds amounting to Rs 1462.00 lakhs have been allocated under the sub mission as 90% central share. 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 Allotted & released under NMAET (2018-19)

(Rs in lakhs)

S No.	Sub Mission	Approved Work plan	Funds Allocated			Funds released (GOI)
			GOI	State Govt.	Total	
1	SMAE	2225.87	948.52	105.39	1053.91	474.26
2	SMSP	573.00	515.70	57.30	573.00	515.70
3	SMAM	1625.00	1462.00	163.00	1625.00	1096.87
	Total	4423.87	2926.22	325.69	3251.91	2086.83

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, Ministry of Agriculture, Department of Agriculture & Cooperation, New Delhi, has implemented Crop Insurance scheme of Pradhan Mantri Fasal Bima Yojna (PMFBY) w.e.f. Kharif, 2016. Crops covered are Wheat & Barley during Rabi season and Maize & Paddy during Kharif season. 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 SBI- GIC and Agriculture Insurance Company are the implementing agencies for cluster-I and cluster-2 respectively in the state during Kharif 2018 season. 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.

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 proposal of farmers / debit of premium from farmers account (Loanee & Non- loanee)	31 st July	31 st December
Cut-off date for receipt of yield data	31 st December	15 th 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 SLCCCI which is convened in each season.

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

During Kharif, 2018 season, six Crops, i.e. Potato, Ginger, Tomato, Cabbage, Cauliflower and Peas & in Rabi season Tomato, Potato, Garlic & Capsicum are to be covered under Restructured Weather Based Crop Insurance Scheme (RWBCIS). 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 and Rabi Crops during its cultivation period.

Coverage Procedure:-

- 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.
- 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.
- 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.

Objectives:

- 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.
- To encourage the farmers to adopt progressive farming practices, high value in-puts and higher technology in Agriculture.
- 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, Kinnaur, Lahaul, Mandi, Kullu and Chamba districts have been covered under RWBCIS & Potato crop of Chamba, Kangra, Kinnaur, Kullu, Lahaul, Mandi, Shimla & Sirmour District has been covered under RWBCIS.

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

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 : June- July

Rabi season : December- January

5. RASHTRIYA KRISHI VIKAS YOJANA (RKVY-RAFTAAR) (90:10) CENTRAL: STATE SHARE) :

RKVY-RAFTAAR was initiated in 2007 as an umbrella scheme for ensuring holistic development of agriculture and allied sectors. The scheme was implemented as an Additional Central Assistance (100%) from GOI upto 2014-15. The funding pattern has been altered in the ratio of 90:10 for North Eastern/ Himalayan States 2015-16 onwards. Now RKVY has been revamped as RKVY-RAFTAAR - Remunerative Approaches for Agriculture and Allied sector Rejuvenation for the remaining period of the Fourteenth Finance Commission.

Objectives of the scheme:

- I. To strengthen the farmers' efforts through creation of required pre and post-harvest agri-infrastructure that increases access to quality inputs, storage, market facilities etc. and enables farmers to make informed choices.
- II. To provide autonomy, flexibility to States to plan and execute schemes as per local/ farmers' needs.
- III. To promote value chain addition linked production models that will help farmers increase their income as well as encourage production/productivity.
- IV. To mitigate risk of farmers with focus on additional income generation activities - like integrated farming, mushroom cultivation, bee keeping, aromatic plant cultivation, floriculture etc.
- V. To attend national priorities through several sub-schemes.
- VI. To empower youth through skill development, innovation and agri-entrepreneurship based agribusiness models that attract them to agriculture.

Govt. of India has conveyed an allocation of Rs. 23.09 Crore in favour of Himachal Pradesh under Normal RKVY for the year 2018-19 as Central Share (90%) and with matching State Share of Rs. 2.57 Crore, the total allocation for the year 2018-19 was Rs. 25.66 Crore.

Keeping in view the allocation received from Govt. of India, the meeting of State Level Sanctioning Committee (SLSC) to approve the RKVY-RAFTAAR projects under Infrastructure & Assets, Value Addition Linked Production Projects and Flexi Funds streams for the year 2018-19 has already been convened on 17th July, 2018. The Stakeholder-wise detail of projects approved and funds allocated (as per allocation received from Govt. of India) for the year 2018-19 is as under:

S.No.	Stakeholder	No. of Projects	Funds allocated (Rs. in lakh)
1.	Horticulture	6	350.00
2.	Animal Husbandry	9	675.00
3.	Fisheries	4	98.40
4.	Industries	1	125.00
5.	Agriculture	10	1317.60
	Total	30	2566.00

6. NATIONAL FOOD SECURITY MISSION (NFSM) :

The National Food Security Mission is a centrally sponsored scheme has been launched in 2007. A provision of Rs. 14.36 crores has been kept during 2018-19 for Rice, Maize, Pulses, Wheat and Nutri-Cereale crop. A sum of Rs. 0.95 crore have been approved for NFSM Rice, Rs. 6.54 crore for NFSM Wheat, Rs. 3.14 crore for NFSM Maize, Rs. 3.23 crores for NFSM Pulses and Rs.0.49 for Nutri-Cereale for the year 2018-19. Himachal Pradesh has been included under this Mission to increase the production and productivity of Wheat, Maize, pulses, Rice and Nutri-Cereale. Under this Mission, 11 Districts in Wheat (Except Shimla) , two Districts Kangra & Mandi under Rice & nine districts except Shimla, Kinnaur and Lahaul & Spiti under Maize & all districts under pulses viz. Mash, Moong, Pea, Lentil & Gram have been selected in the State. 10 Districts except Lahaul and Kinnaur have been selected for Nutri-Cereale (Jawar, Bajra, Kodomillet, Prosomillt, Foxtailmillt, Littelmillt, Fingermillt). The Mission provides assistance for laying cluster demonstrations, distribution of Certified Seed, Micro-Nutrients, Plant and soil protection material, improved implements and machinery. During last year Rs. 17.77 were spent under this scheme. The Mission would be very helpful in increasing the productivity level of Rice, Maize, Pulses, Wheat & Nutri- cereale. 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:

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

7. 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.

8. 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. 540.982 crore.

S.No.	Department	PMKSY Component	No. of Scheme	Annual Action Plan approved by SLSC for 2018-2019 (Rs. in Crore)	Physical Targets for 2018-2019 (Ha.)
1.	Irrigation & Public Health	AIBP	7	85.00	1000.00
		Har Khet Ko Pani	114	128.80	3000.00
		-do- CAD&WM	28	88.00	2000.00
Total			149	Rs. 301.80 crore	6000.00
2.	Department of Horticulture	Per Drop More Crop -Micro-Irrigation	2842	10.656	2556.00
3	Department of Agriculture	Per Drop More Crop -Other Interventions	3086	28.116	2397.00
4.	Rural Development	PMKSY- Watershed	163	200.41	161372
Grand Total			24904	540.982	

Govt. of India has made tentative allocations of Rs. 30.00 crore for execution of Per Drop More Crop-Other Interventions component for 2018-19 in respect of Department of Agriculture and released Rs. 12.00 Crore as Central share on funding pattern of 90:10 basis (90% Central Share & 10% State share) for executing of Water Harvesting activities during 2018-19 under this component.

9. AGRISNET PROJECT:

The Government of India has launched a Central sector scheme titled "Strengthening of/ promoting agricultural informatics and communications" of which one component is AGRISNET [Agricultural Resources Information System network]. This envisages that the tools of ICT would provide networking of agriculture sector not only in the country but globally and the state government department will have reservoir of database. It will bring farmers, researchers, scientists and administrators together by establishing Agriculture information online. The Department of Agriculture, Horticulture, Animal Husbandry and Fisheries are four departments under this project.

AGRISNET Portal has been launched officially on 28/7/10 and is available at <http://hpagrisnet.gov.in>. Department of IT, HP has developed a data structure in the form of AGRISNET Portal, which encompasses wide array of information on district wise package of practices of major crops, Agriculture, Horticulture, Animal husbandry and Fisheries, collected from different stakeholder Departments. Such data Bank will facilitate Stakeholder departments to provide correct answers to the farmers and may also be used by extension personnel and farmers directly to download application / subsidy forms.

10. 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 31/3/2016. 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.

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

Government has developed various Web portals, call centres, website as well as Mobile apps by which farmer are receiving advisories as well as getting information from these online services as per their need / requirement. The ICTs tools such as Internet and Mobile networks have the potential to provide agro-information services that are affordable, relevant (timely & customized), up-to date, high accessibility and farmer friendly. In agricultural sector, our conventional extension methods are laborious and time consuming. The Department of Agriculture, Himachal Pradesh is already providing the useful information / advisories/ schemes guidelines/ applications forms etc. to the farmers of State through the use of information communication Technology. This facilitates information delivery and bridge the existing gap between different receivers in the system. Some of these are:

1. 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.

2. 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. With click of a button, they can get the information on weather of current day and next 5 days, Pesticide/ Seed/ Fertilizers dealers information, market prices, agro advisories, plant protection, IPM Practices etc. An additional tab directly connects the farmer with the Kisan 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. It is available in Google play store and on mkisan- Mobile Apps section (mkisan.gov.in).

3. 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. It can be downloaded from Google play store.

4. Crop Insurance App

This Mobile app developed by the Ministry of Agriculture, Government of India to help the farmers about crop insurance. It can be downloaded from Google play store.

5. 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. It can be downloaded from Google play store.

6. Kisan Call Centres (KCC)

Main aim of the KCC is to answer farmers' queries on a telephone call in their own dialect. A country wide common eleven digit Toll Free number 1800-180-1551 has been allotted for Kisan Call Centre. This number is accessible through mobile phone and landline of the telecom networks including private service providers. Call centres services are available from 6.00 A.M. to 10.00 P.M. on all seven days of the week at each KCC Location

7. Pilot Project on improvement of Services to Farmers through Mobile Technology (Him m-kisan Portal)

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.agnimobile.hp.gov.in.

8. Departmental Website:

The Department is also delivering information to the farmers of the State through Departmental website. One can access the website at www.hpagriculture.com. The farmers can get the information about Departmental activities, guidelines of the schemes, office wise contact details and various others programmes etc. The farmers can also download the various types of forms including Seed / Pesticide / Fertilizer licence.

9. Soil Testing Portal

Soil testing service has also been 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. The Government of India has launched a new scheme based on which the sample of soil shall be drawn on GPS basis.

10. 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.

11. AGiSAC

AGiSAC has developed web-based and desktop applications for the State user Departments such as Forest, Health, Education, Irrigation & Public Health, Environment, Science & Technology, Tourism, Agriculture, Horticulture, Rural Development etc; and is in process of developing applications for other State user Departments/ Agencies. Various types of GIS applications developed by AGiSAC include Departmental Information System, Advisories & alerts, Surveillance & Regulatory applications etc.

12. Doordarshan:

The first use of Doordarshan is to provide agriculture related information and knowledge to farming community. It has two components (i) narrowcasting using high/low transmitters of Doordarshan (ii) regional and national agriculture programmes in terrestrial mode of transmission. Presently, Doordarshan Shimla is telecasting Krishi Darshan Programme five days in a week.

13. All India Radio:

This component of scheme envisages use of FM transmitters of AIR to broadcast area specific agriculture Programme 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.

14. Kisan Knowledge Management System (KKMS Portal)

All the District heads (DLDO) at District level & SMS / ADO (BLDO) at block level have already been assigned as Pool of Experts under the KKMS portal and are the point of contacts for providing the solutions for the problem requests raised by the farmers on the application.

15. eNAM:

National Agriculture Market (NAM) is a pan-India electronic trading portal which networks the existing APMC mandis to create a unified national market for agricultural commodities. The NAM Portal provides a single window service for all APMC related information and services. NAM addresses challenges by creating a unified market through online trading platform, both, at State and National level and promotes uniformity, streamlining of procedures across the integrated markets, removes information asymmetry between buyers and sellers and promotes real time price discovery, based on actual demand and supply, promotes transparency in auction process, and access to a nationwide market for the farmer, with prices commensurate with quality of his produce and online payment and availability of better quality produce and at more reasonable prices to the consumer.