

Krishi Kalyan Abhiyan



ICAR-Agricultural Technology Application Research Institute
Ludhiana - 141 004, Punjab

Krishi Kalyan Abhiyan

(1st June - 15th August 2018)



ICAR- Agricultural Technology Application Research Institute
Ludhiana - 141004, Punjab

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FOREWORD



Even though the share of agriculture in the GDP of India is declining, the agrarian economy continues to be the largest employer and source of livelihood for more than half of its population. Climate change, depleting natural resources, declining area under cultivation, indiscriminate application of fertilizers, pesticides and other chemicals etc. pose serious threat to the sustainability of the country's agriculture. While mitigating all these challenges, Government of India is striving to double the farmers' income by 2022 through its four pronged strategy of reducing cultivation costs, ensuring profitable prices, processing farm waste and creating non-farm sources of income. Consequently, Ministry of Agriculture and Farmers' Welfare launched **Krishi Kalyan Abhiyan** during 1st June to 15th August 2018 in 117 the Aspirational Districts of the country as identified by the NITI Ayog. The drive aimed to aid, assist and advice farming community to transform the state of agriculture through improved agricultural techniques and raise the farmers' income.

The *Abhiyan* comprised specifically identified activities to saturate 25 villages with more than 1000 population each in aspirational districts. The overall coordination and implementation at the district level was done by Krishi Vigyan Kendra of that district. ICAR-ATARI, Zone-I successfully implemented this Abhiyan in the seven districts across the states of Punjab, Himachal Pradesh, Uttarakhand and Jammu & Kashmir. Distribution of Soil Health Cards and Mini Kits of Pulses and Oilseeds, Bovine Vaccination, making NADEP Pits, demonstrations on Micro-irrigation and Integrated Farming Systems etc. were the core activities undertaken during the *Abhiyan*. Training programmes were also organized by the KVKs on different themes, specially focusing rural women and youth.

I appreciate the team KVK for their relentless efforts at the grass root level in collaboration with state government agencies to make this Abhiyan a great success. ICAR-ATARI, Ludhiana has documented the efforts under Krishi Kalyan Abhiyan in the form of a bulletin. I congratulate the authors for bringing out this publication, which is a testimony of the painstaking efforts in the modest manner.

(A.K. Singh)

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We also express our sincere thanks to Dr. V.P. Chahal, Assistant Director General (Agri. Extn.), ICAR for his kind support and valuable guidance in implementing this Abhiyan.

We also acknowledge the contributions made by the team of seven KVKs providing the technical reports and information in respect of the nine activities carried out during the Abhiyan.

AUTHORS

CONTENTS

Sr. No.	Title	Page No.
	Acknowledgement	
1.	Executive summary	1
2.	Introduction	4
3.	Districtwise report of Aspirational districts under Krishi Kalyan Abhiyan	8
	3.1. Ferozpur	9
	3.2. Moga	21
	3.3. Chamba	33
	3.4. Baramulla	45
	3.5. Kupwara	54
	3.6. Haridwar	63
	3.7. Udham Singh Nagar	73
4.	Conclusion	82
5.	Learning from Kisan Kalyan Abhiyan	83
	Annexures	85

1. EXECUTIVE SUMMARY

Krishi Kalyan Abhiyan (KKA) initiated from **1st June to 15th August 2018** in the Aspirational districts selected by NITI Aayog to motivate the farmers towards achieving the goals of doubling Farmers' Income by 2022.

The **main aim** of the Abhiyan was to *aid, assist and advice* the farmers how to improve their farming techniques to get better income from their farms. During KKA, 25 villages from each of 112 Aspirational districts were selected with more than 1000 population in Aspirational district identified with the help of Ministry of Rural Development as per the directions received from NITI Aayog. The districts where the number of villages was less than 25 and population was more than 1000 than all the villages of that district were covered under KKA.

Action Plan of Krishi Kalyan Abhiyan

An Action Plan was formulated comprising various departments under the Ministry namely Department of Agriculture, Cooperation and Farmers' Welfare (DAC & FW), Department of Agricultural Research & Education (ICAR-DARE) and Department of Animal Husbandry Dairying & Fisheries (DAHD & F) was implemented to engulf these villages with these agriculture and livestock activities for the farmers.

Various activities to promote best practices and augment farmers' income were undertaken under this Abhiyan such as:

1. Distribution of Soil Health cards to all farmers.
2. 100% coverage of bovine vaccination for control of Foot and Mouth Disease (FMD) in each village.
3. 100% coverage of Sheep and Goat for eradication of Pest des Peritts ruminants (PPR)
4. Distribution of Mini Kits of pulses and oilseeds to all.
5. Distribution of Horticulture/Agro Forestry/ Bamboo plant @5 per family (location appropriate).
6. Making 100 NADEP Pits in each village.
7. Artificial insemination saturation.
8. Demonstration programmes on Micro-irrigation at KVKs.
9. Demonstrations of integrated farming system.
10. Small Farm implements were also distributed.

Krishi Vigyan Kendras, were selected for overall coordination, field level monitoring and uploading the data on website of KVK PORTAL for updating the activities accomplished in their districts each day.

Implementation of the Abhiyan in Zone-I

Krishi Kalyan Abhiyan was implemented during **1st June to 15 August 2018** in the four states namely Punjab, Himachal Pradesh, Jammu & Kashmir and Uttarakhand to improve the income of the farmers in the Aspirational districts. Under Zone-I and 7 districts (Moga, Ferozepur, Chamba, Kupwara, Baramulla, Haridwar and Udham Singh Nagar) were covered under Krishi Kalyan Abhiyan to disseminate the latest information to the farmers to enhance their farm income.

- Krishi Vigyan Kendra's and State Department of Agriculture of Aspirational districts collected soil samples from all selected **173** villages and **36271** soil health cards were distributed among the **36271** farmers during the Abhiyan. The majority of soil health cards were distributed in district Chamba i.e 8137 cards to the farmers.
- Department of Agriculture and Farmers' Welfare distributed **7487** mini- kits of oilseed and pulses among **6732** farmers of **155** villages in seven districts of Zone-I. The mini kits of (summer moong, kharif moong and Urd) of 4 kg each, sesame of 1 kg each and rapeseed and mustard of 2 kg each were distributed among the farmers. The farmers of district Ferozepur received maximum pulse kits **2298** during Abhiyan.
- Department of Forestry, of Aspirational districts distributed **96,265** plants of different species like mango, deak, neem, shisham, toot, amrud, jamun, apple etc. among the **27,378** farmers of **174** villages. Ferozepur district recorded highest distribution of 20450 plants to 11529 farmers for plantation.
- Each KVK constructed **300** pits in their respective districts. Along with this, waste decomposer bottles were also provided to all the farmers who set up NADEP compost pits/ vermi-compost units. Overall **2100** NADEP pits were constructed in **106** villages in seven districts. For construction of NADEP pits a sum of Rs. 1,47,000 was released to the KVKs for the farmers who had constructed NADEP pits in their fields.
- Hundred percent coverage of bovine vaccination for Foot and Mouth Disease (FMD) in all the **174** villages was completed where 93013 animals of 66611 farmers were vaccinated against the disease. The highest number of dairy farmers (15932) of district Ferozepur got vaccinated their bovines.
- 100 percent vaccination of sheep and goat for eradication of plague was done in which **65093** animals of **23969** farmers of **162** villages were vaccinated during the Abhiyan. The majority vaccination against PPR was registered in district Chamba where **14918** animals of **10951** farmers were vaccinated against the disease.

- Under KKA, artificial insemination saturation was free for the selected villages of Aspirational districts. Department of Animal Husbandry inseminated **22023** animals of **20580** farmers from **174** selected villages. The maximum number of animals inseminated was from district Haridwar i.e. **7409** animals.
- As a part of this KKA, inter-alia one day and three days training programmes were conducted by KVKs to guide farmers to enhance their income. The trainings were conducted in Beekeeping, Mushroom Production, Kitchen Gardening and Vermi-Composting. Seven KVKs of Zone-I conducted **788** training programmes for **35894** farmers of **170** villages. The training programmes conducted by KVKs of Punjab received maximum response i.e **17728** farmers attended the training programmes.
- Demonstration on micro irrigation was conducted by four KVKs to familiarize farmers with the techniques and utilize the water resource in the best possible way. In Punjab and Uttarakhand it was demonstrated in crops and in Himachal Pradesh micro- irrigation was demonstrated in orchards. **Five** demonstrations in **41** villages for **272** farmers were conducted by four KVKs of Zone-I.
- Five districts of ICAR-ATARI, Zone-I, Ludhiana demonstrated the various models of Integrated Farming System. Various components like Fishery, Poultry, Dairy, beekeeping unit, etc. were integrated to disseminate by seven KVKs of Aspirational districts. **Forty Six** training programmes were conducted for **1487** farmers of **83** villages during 1st June to 15 August 2018.
- To encourage farmers for mechanization, **2126** agricultural implements were distributed on subsidized rates. Implements like happy seeder zero till drill, super SMS etc. were distributed among the farmers of **159** villages among **2135** farmers. Along with distribution of the implements self-help groups/farmers groups were formed for custom hiring centres. Haridwar district distributed maximum number of implements among **509** farmers in their district.

2. KRISHI KALYAN ABHIYAN

Introduction:

India is an agrarian country where 60% population is dependent on agriculture and its development decides the economic condition of the country. If the economy of the nation is growing with the main emphasis on agriculture the trajectory of growth for uplifting millions of people from poverty can become a reality. The UNDP's report of 2016 puts India at 131st place out of 188 countries in terms of Human Development Index (HDI). During January 2018, the Prime Minister of India launched a special drive “**Transformation of Aspirational Districts**”. These Aspirational Districts were the underdeveloped districts of various states and this programme was initiated to effectively transform these districts. A total of 117 Aspirational Districts from 28 States were identified by NITI Aayog during 2017-18 on the basis of five thematic areas. The ranking of these districts was done on the basis of thematic areas such as **Education; Health and Nutrition; Agriculture and Water Resources; Financial Inclusion; Skill Development and Basic Infrastructure**.

These districts have been designated as Aspirational Districts rather than backward to infuse the sense of positivity for upliftment and development at a swift pace so that these districts can be mainstreamed at par with other districts. These thematic areas have direct influence on the quality of life of the individuals and economic efficiency of the household and consequently the nation..

Objectives for Transformation of Aspirational Districts

- Aim to quickly and effectively transform Aspirational Districts.
- Identify the areas of immediate improvement, measure progress and rank the districts.

Pathway of action:

Following mechanism was followed to accomplish the objectives in time bound manner.

- **Convergence** of central and state schemes running in these districts.
- **Collaboration** of central and state level officers to achieve the target.
- **Competition** among these districts to outperform one another and improve in the thematic areas of concern.

Creation of dashboard for monitoring of the progress of Aspirational Districts

To monitor the progress of Aspirational Districts special dashboard was created named “**Champions of Change**”. The District Collectors were made incharge officers of their district to monitor the progress of their districts. The officers of level of Joint Secretary/Additional Secretary were nominated to become the Central Prabhari Officers. The district information officers were trained to feed the data on the dash board so that the monitoring of the progress of the district achievements could be monitored effectively.

Krishi Kalyan Abhiyan

Through this matrix ranking, NITI Ayog graded these Aspirational Districts. Targets were set for execution based on timeline manner. The central and state government agencies worked in convergence mode to achieve the targets in a holistic manner. Further to boost the agriculture sector “**Krishi Kalyan Abhiyan**” was launched by Ministry of Agriculture and Farmers' Welfare for improving the agricultural production and income of the farmers. This programme was implemented with the **3Cs** i.e. **Convergence, Collaboration and Competition**. This KKA was implemented for 75 days in a comprehensive manner to target the least developed villages of each Aspirational District in **AGRICULTURE WELFARE DRIVE**.

KRISHI KALYAN ABHIYAN—June 1st to August 15, 2018

Krishi Kalyan Abhiyan (KKA) started on **1st June and ended by 15th August 2018** in the Aspirational Districts with the objective to motivate the farmers towards achieving the goals of doubling of farmers' Income by 2022. KKA initiatives percolated down to village level. The **main aim** of this Abhiyan was **to aid, assist and advice** the farmers how to improve their farming techniques to get remunerative income from their farms.

Table: List of districts covered under Krishi Kalyan Abhiyan started from 1st June to 15 August 2018 in India

SI. No.	State	No. of districts#	SI. No.	State	No. of districts#
1.	Andhra Pradesh	3	15	Manipur	1
2.	Arunachal Pradesh	1	16	Meghalaya	1
3.	Assam	7	17	Mizoram	1
4.	Bihar	13	18	Nagaland	1
5.	Chhattisgarh	10	19	Odisha	10
6.	Gujarat	2	20	#Punjab	2
7.	Haryana	1	21	Rajasthan	5
8.	#Himachal Pradesh	1	22	Sikkim	1
9.	#Jammu & Kashmir	2	23	Tamil Nadu	2
10.	Jharkhand	19	24	Telangana	3
11.	Karnataka	2	25	Tripura	1
12.	Kerala	1	26	Uttar Pradesh	8
13.	Madhya Pradesh	8	27	#Uttarakhand	2
14.	Maharashtra	4			
	Grand Total	112			

#: No. of Aspirational Districts covered under KKA in Zone-1

ICAR-ATARI, Zone-1, Ludhiana

During KKA, 25 villages were identified having population more than 1000 from each of Aspirational District. The districts where the number of villages was less than 25 and population was not more than 1000, than all the villages of that district were covered under this Abhiyan.

Action Plan of Krishi Kalyan Abhiyan

A time bound action plan was formulated by the Ministry of Agriculture and Farmers' Welfare involving Department of Agriculture, Cooperation and Farmers' Welfare (DAC&FW), Department of Agricultural Research & Education (ICAR-DARE) and Department of Animal Husbandry Dairying & Fisheries (DAHD & F) in an integrated manner. The Action Plan was implemented to engulf these villages with agricultural and livestock based activities.

The technical action plan in the Abhiyan was developed in consultation with ATMA and other line departments at the district level. At the central level, the KKA was led by Ministry of Agriculture and Farmers' Welfare and the Additional Secretary, was the overall incharge for Central and State Coordination Implementation Programme.

Various activities to promote best practices and to augment farmers' income were undertaken under this Abhiyan are mentioned below:

1. Soil Health Cards distribution to all farmers of the selected villages
2. Hundred per cent coverage of bovine vaccination to control Foot and Mouth Disease (FMD) in selected villages
3. 100% coverage of sheep and goat for eradication of Peste des Petits Ruminants (PPR)
4. Distribution of Mini Kits of pulses and oilseeds
5. Distribution of 5 plants per family of horticulture/agro forestry (location specific)
6. Artificial Insemination (AI) saturation
7. Small Farm Implements distribution
8. Demonstration on Micro-irrigation at KVKs of each districts
9. Making 20 NADEP Pits in each village
10. Demonstration of Integrated Farming System (IFS) at KVKs

The overall coordination in the 25 villages of a district was done by Krishi Vigyan Kendras of the district. KVKs were deputed as nodal agency of their respective districts for overall coordination, field level monitoring and updating the achievements on KVK Portal. Apart from KVKs, several other officers from Ministry of Agriculture and Farmers' Welfare were assigned monitoring of this special drive for implementation of the activities of Abhiyan.

Krishi Kalyan Abhiyan In Zone-1

In Zone-1, Krishi Kalyan Abhiyan was launched in 4 states comprising Punjab, Himachal Pradesh, Jammu & Kashmir and Uttarakhand. NITI Aayog identified seven districts in Zone-1 as Aspirational Districts for commencing development of these

Krishi Kalyan Abhiyan

districts. At Zonal level, ICAR-ATARI was assigned for overall monitoring of the activities implemented by KVKs in their districts. ICAR-ATARI as a central agency played a key role in achieving the targets set for the districts to be achieved by KVKs and allied departments.

Krishi Kalyan Abhiyan was successfully implemented in Zone-1 with the collaborative efforts from Central and State government Ministries and Departments of Agriculture and allied sciences.

Table: List of under Aspirational districts from different states of ICAR-ATARI, Zone-I

SI. No	State	District	Rank of District	Score (NITI Aayog)
1	Punjab	Ferozepur	16	41.70%
2	Punjab	Moga	34	38.75%
3	Himachal Pradesh	Chamba	22	40.36%
4	Jammu & Kashmir	Baramulla	37	37.78%
5	Jammu & Kashmir	Kupwara	33	38.83%
6	Uttarakhand	Haridwar	24	40.05%
7	Uttarakhand	Udham Singh Nagar	6	46.36%

The Additional Secretary, DAC&FW requested all the Chief Secretaries and Principal Secretaries of State Government to direct district administration and district line departments of Agriculture and Allied Sciences to extend full cooperation to the KVKs for successful implementation of the technical programme of KKA (**List of officers involved in the KKA attached as Annexure-I**).

3. DISTRICT-WISE OUTPUT UNDER KKA

Krishi Kalyan Abhiyan was launched in the Aspirational districts of the country during **1st June to 15th August 2018** by the Government of India with the collaborative efforts of Central and State Government Agencies among the selected 112 Aspirational districts in the 25 villages of each district. This programme was implemented in seven districts of four states functioning under Zone-I. All the listed activities in the action plan of Krishi Kalyan Abhiyan were implemented by the Krishi Vigyan Kendars with the help of State level agencies working in different line departments. The list of districts which implemented KKA is as follows :

1. Ferozepur
2. Moga
3. Chamba
4. Baramulla
5. Kupwara
6. Haridwar and
7. Udham Singh Nagar



Districts of ICAR-ATARI, Zone-I covered under Krishi Kalyan Abhiyan

3.1 FERROZEPUR (Punjab)

3.1.1 About the district

3.1.1.1 Geography and Agriculture: The total geographical area of the district is 5303 km² out of which 3258.78 km² falls under Bet area and 196.63 km² falls under border area. The district is divided into three main belts running somewhat parallel to the course of river Sutlej. On South-West side, the bet area is called “Hittar” and has alluvial dark and gray clay soils intermixed with straits of sand. On the South-East side, the Rohi and Mukhi Plains have light and sandy soils and brackish water in wells. The district has two types of soils namely chestnut brown (Alluvial; 69%) and desert soil (31%).

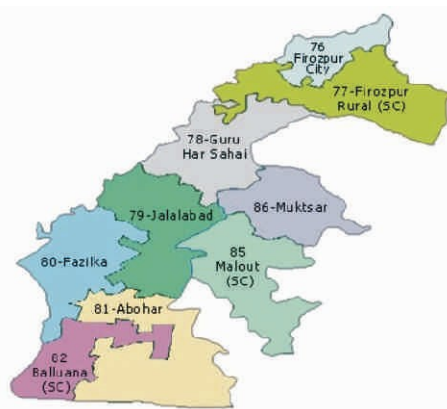


Fig: Ferozepur district

Ferozepur district has 654 villages in six blocks. The area under forest cover is about 1% in the district and 2% area under horticulture crops. Ferozepur district has 4.44 lakh hectares as net irrigated area (Table 3.1.1.a). The total cultivated area is 4,75,000 ha in this district.

Table 3.1.1.a: Area distribution in the Aspirational district Ferozepur.

District	Ferozepur
Location	Southwest Punjab; Latitude-31.0026° N; Longitude- 74.8741° E
Climate	Sub tropical
Agro ecological situation	Semi-arid to arid
Total geographical area	2,38,034 ha or 5303 km ²
No. of development blocks	6
No. of villages	654
Cultivated area	4,75, 000 ha
Area irrigated by canals	1.69 lakh ha
Area irrigated by tube wells	2.75 lakh ha
Total irrigated area	4.44 lakh ha
Un-irrigated area	0.02 lakh ha
Net cultivated area	83.83%
Area under horticultural crops	2%
Area under forest	1%

Table 3.1.1.b: Major farming systems/enterprises in the district

S.No.	Farming system/enterprise	
1.	Irrigated (bore well)	Wheat- paddy, vegetable-paddy, berseem- maize (fodder)
2.	Irrigated (canal)	Wheat- paddy, vegetable- paddy, berseem- maize(fodder)
3.	Enterprises	Dairy, Bee-Keeping, Poultry, Mushroom cultivation

Table 3.1.1.c: Soil type(s) of district Ferozepur

S. No	Soil type	Characteristics
1.	Loamy sand to sandy loam	Soils are light to medium textured. However, even heavy textured clay soils are also found in some pockets of district. Soils are having low to high water permeability, low to medium in organic carbon, medium to high in phosphorus & high in available potash.

Table 3.1.1.d: Area, production and productivity of major crops cultivated in the district (2017-18)

S. No	Crop	Area (000 ha)	Production (000' t)	Productivity (q/ha)
Kharif				
1	Paddy	185	849	39.11
2	Moong	0.3	0.2	7.30
Rabi				
1	Wheat	188	984	52.34
2	Oilseed	0.5	0.7	14.57

3.1.2 Action Plan of Krishi Kalyan Abhiyan

3.1.2.1 Action villages

Krishi Kalyan Abhiyan (KKA) was implemented in 25 villages of district Ferozepur selected with the assistance of Department of Agriculture Cooperation and Farmers Welfare (DAC &FW), New Delhi and Ministry of Rural Development on the recommendations of NITI Aayog. District Ferozepur of Punjab was selected as Aspirational district by NITI Aayog during 2018. The list of 25 villages selected from six blocks for implementation of KKA activities in Ferozepur is given in Table 3.1.2.1.

3.1.2.2 Coordination & Implementation of KKA

The overall programme was implemented in 25 identified villages of the district where KVK acted as the nodal agency for its implementation. The other concerned departments involved in programme were Department of Agriculture, Department of Animal Husbandry, Department of Forestry and Department of Horticulture. The list of officials who collaborated during this programme is given in Table 3.1.2.2.

Table 3.1.2.1: Block wise selected villages of district Ferozepur

S. No	Block	Villages selected for KKA
1	Ferozepur (7)	Bandala, Dheera Patra Fattu wala, Gammewala, Jhok Harihar Mahalam and Wahka Mour
2	Ghal Khurd (8)	Changali Jadid, Changali Qadim, Fidge, Karmoowala, Malwal, Mana Singh Wala, Thethar Kalan, and Wara Bhai Ka
3	Guru Har Sahai (4)	Baje Ke, Chak Nidhana, Mandiwal and Thara Singh wala Uttar
4	Makhu (2)	Rasulpur and Rode Jalle Wala
5	Mamdot (1)	Alfu Ke
6	Zira (3)	Markhai, Pandori Khatrian and Sadhu Wala
	Total	25 villages

Table 3.1.2.2: List of officials deputed for KKA in district Ferozepur

S.No.	Duty assigned	In-Charge
1	State in-charge of Punjab	Sh. M S Dhillon, ITS
2	District in-charge	Dr. Ravinder Yadav, Assistant Director, NCOF, Department of Agriculture Cooperation and Farmers Welfare, New Delhi
3	Nodal Officer	Dr. Gurjant Singh Aulakh, Programme Coordinator, KVK Ferozepur
Collaboration with other state departments		
4	Department of Agriculture and Farmers' Welfare	Dr. Jangir Singh, Agriculture Officer, Dept of Agriculture and Farmers Welfare
5	Department of Animal Husbandry	Deputy Director, Animal Husbandry
6	Department of Forestry	<ul style="list-style-type: none"> • Sh. Jarnail Singh, Forest Officer, Dept of Forestry • Sh. Kashmir Singh, Range Forest Officer, Dept of Forestry, Ferozepur • Sh. Gurbakhs Singh, Range Forest Officer, Dept of Forestry, Ferozepur
7	Department of Horticulture	Sh. Narinder Singh, Deputy Director, Horticulture, Ferozepur

3.1.3 Output under KKA

3.1.3.1 Distribution of soil health cards

In district Ferozepur, Department of Agriculture, Ferozepur collected soil samples from selected 23 villages and two village samples were collected and analyzed by KVK Ferozepur and a total of **2,677** soil health cards were issued to the farmers of 25 villages as given in Table 3.1.3.1.

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Demonstration on Soil Sampling at farmers field

Table 3.1.3.1: Details of distribution of soil health cards and minikits of pulses

Sl.No	Village (village code)	Target	Distribution of soil health cards	Distribution of pulses minikit #
1	Alfooke (247)	53	53	100
2	Baje Ke (300)	131	131	122
3	Bandala (328)	169	169	85
4	Chak Nidana (177)	79	79	105
5	Changali Qadim (136)	95	95	100
6	Dhana Shahid (338)	76	81	60
7	Dhira Pattra (217)	118	168	85
8	Fatuwala (89)	31	31	100
9	Jhok Harihar (215)	173	268	84
10	Karman (265)	93	93	70
11	Karmuwala (155)	40	80	80
12	Mahalam (33)	41	41	85
13	Malwal (201)	147	147	84
14	Mana Singhwala (203)	70	70	80
15	Mandiwal (171)	44	44	123
16	Markhai (355)	110	204	100
17	Nurpur (213)	129	237	85
18	Pandori Khatrian (333)	103	118	100
19	Phide (173)	66	66	100
20	Rasulp ur (65)	38	87	100
21	Rode Jallewala (23)	92	183	100
22	Sadhu wala(337)	50	79	100
23	Tara Singhwala (226)	18	18	50
24	Thethar Kalan (159)	74	74	100
25	Warabhai (189)	61	61	100
	Total	2101	2677	2298
#: The target of mini-kits of pulses distribution per village was 80.				

3.1.3.2 Distribution of mini-kit of pulses

To improve the soil health and diversification in crops Department of Agriculture, Ferozepur, distributed mini kits of summer moong containing variety *IPM 02-03* of 4 kg each among the farmers of 25 selected villages. The pulse crop will not only diversify the cropping pattern but will provide vegetable protein to the farming families. A total of **2298** mini kits of pulses were distributed among **2298** farmers. The details are presented in Table 3.1.3.1.



Distribution of Mini Kits of Pulses at Ferozepur

3.1.3.3 Bovine vaccination against Foot and Mouth Disease (FMD)

The department of Animal Husbandry, Ferozepur vaccinated animals against Foot and Mouth disease. Bovine vaccination for Foot and Mouth Disease (FMD) was conducted in all 25 villages where **15,932** animals of farmers were vaccinated against FMD and 100% saturation was achieved in all the villages as given in Table 3.1.3.2.

3.1.3.4 Vaccination against Sheep and Goat Plague (PPR)

In district Ferozepur, to prevent sheep and goats plague (Peste des Petits ruminants), Department of Animal Husbandry, Ferozepur vaccinated **919** sheep and goat flocks of 25 villages as mentioned in Table 3.1.3.2.



Vaccination against Sheep and Goat Plague (PPR)

ICAR-ATARI, Zone-1, Ludhiana

Table 3.1.3.2: Details of village-wise vaccination for FMD and PPR of animals

Sl.No	Village (village code)	Vaccinated against (FMD)#	Vaccinated against PPR#
1	Alfooke (247)	318	0
2	Baje Ke (300)	415	50
3	Bandala (328)	1407	30
4	Chak Nidana (177)	300	0
5	Changali Qadim (136)	740	44
6	Dhana Shahid (338)	649	0
7	Dhira Pattra (217)	400	0
8	Fatuwala (89)	500	0
9	Jhok Harihar (215)	500	0
10	Karman (265)	545	16
11	Karmuwala (155)	1130	20
12	Mahalam (33)	200	0
13	Malwal (201)	1600	100
14	Mana S inghwala (203)	600	100
15	Mandiwal (171)	145	0
16	Markhai (355)	515	100
17	Nurpur (213)	824	0
18	Pandori Khatrian (333)	828	65
19	Phide (173)	800	70
20	Rasulpur (65)	368	109
21	Rode Jallewala (23)	884	15
22	Sadhuwala(337)	642	80
23	Tara Singhwala (226)	450	0
24	Thethar Kalan (159)	542	70
25	Warabhai (189)	630	50
	Total	15932	919

100% saturation was achieved in the selected villages for vaccination against FMD and PPR (Peste des Petits Ruminants also known as sheep and goat plague) of animals

3.1.3.5 Artificial insemination (AI)

Artificial insemination programme was carried out by the Department of Animal Husbandry, Ferozepur, under the guidance of Deputy Director (Animal Husbandry). A total of **1361** animals got artificially inseminated in all 25 selected villages and is presented in the Table 3.1.3.3.

Table 3.1.3.3. Village-wise AI cases undertaken in the district Ferozepur

S.No	Village (village code)	AI of Animals#
1	AI fooke (247)	84
2	Baje Ke (300)	26
3	Bandala (328)	86
4	Chak Nidana (177)	39
5	Changali Qadim (136)	106
6	Dhana Shahid (338)	42
7	Dhira Pattra (217)	17
8	Fatuwala (89)	16
9	Jhok Harihar (215)	51
10	Karman (265)	78
11	Karmuwala (155)	87
12	Mahalam (33)	19
13	Malwal (201)	81
14	Mana Singhwala (203)	21
15	Mandiwal (171)	12
16	Markhai (355)	47
17	Nurpur (213)	66
18	Pandori Khatrian (333)	164
19	Phide (173)	22
20	Rasulpur (65)	75
21	Rode Jallewala (23)	37
22	Sadhuwala(337)	19
23	Tara Singhwala (226)	34
24	Thethar Kalan (159)	20
25	Warabhai (189)	112
	Total	1361

100 animals per village of AI were attended under KKA in these villages



Artificial insemination of animals in Ferozepur

3.1.3.6 Distribution of Planting Material

To promote forestry and horticulture in Aspirational district, under KKA, department of agro forestry distributed **20,450** plants of different species like Deak, Neem, Shisham, Toot, Guava, Jamun, etc. among the 100 farmers of 25 villages at the rate of 5 plants per family and presented in Table 3.1.3.4.

Table 3.1.3.4: Village-wise distribution of Planting Material in district Ferozepur

S.No	Village (village code)	No. of plants distributed#
1	Alfooke (247)	650
2	Baje Ke (300)	600
3	Bandala (328)	1000
4	Chak Nidana (177)	650
5	Cha ngali Qadim (136)	2000
6	Dhana Shahid (338)	1530
7	Dhira Pattra (217)	500
8	Fatuwala (89)	800
9	Jhok Harihar (215)	800
10	Karman (265)	500
11	Karmuwala (155)	700
12	Mahalam (33)	870
13	Malwal (201)	800
14	Mana Singhwala (203)	700
15	Mandiwal (171)	750
16	Markhai (355)	1440
17	Nurpur (213)	500
18	Pandori Khatrian (333)	760
19	Phide (173)	800
20	Rasulpur (65)	500
21	Rode Jallewala (23)	1000
22	Sadhuwala(337)	800
23	Tara Singhwala (226)	600
24	Thethar Kalan (159)	700
25	Warabhai (189)	500
	Total	20,450

#: Horticultural/ Forestry plants of Deak, Neem, Shisham, Toot, Guava and Jamun were distributed under KKA in these villages at the rate of 5 plants per family for 100 families in selected villages.

3.1.3.7 Distribution of Agricultural Implements

To encourage farmers to incorporate crop residue and paddy straw in the soil and to stop burning of the straw, agricultural implements were distributed on subsidized rates under KKA. Implements like happy seeder zero till drill, super sms, rotavator, paddy straw chopper/ shredder, mulcher etc. were distributed among farmers of the selected villages by the Department of Agriculture, Ferozepur as given in the Table 3.1.3.5.

3.1.3.8 Training programmes

Training programmes were conducted in each village by KVK on various topics like bee keeping, mushroom cultivation, vermi-composting, INM in cereals, integrated weed

Table 3.1.3.5: Village-wise distribution of agricultural implements in district Ferozepur

S. No	Village (village code)	No. of farmers benefitted#
1	Alfooke (247)	8
2	Baje Ke (300)	8
3	Bandala (328)	7
4	Chak Nidana (177)	0
5	Changali Qadim (136)	13
6	Dhana Shahid (338)	8
7	Dhira Pattra (217)	11
8	Fatuwala (89)	4
9	Jhok Harihar (215)	13
10	Karman (265)	5
11	Karmuwala (155)	9
12	Mahalam (33)	5
13	Malwal (201)	10
14	Mana Singhwala (203)	5
15	Mandiwal (171)	2
16	Markhai (355)	15
17	Nurpur (213)	2
18	Pandori Khatrian (333)	20
19	Phide (173)	5
20	Rasulpur (65)	3
21	Rode Jallewala (23)	15
22	Sadhuwala(337)	12
23	Tara Singhwala (226)	0
24	Thethar Kalan (159)	4
25	Warabhai (189)	4
	Total	188

#: Against the target of distribution of 10 implements in each village, happy seeder zero till drill, super SMS, rotavator, paddy straw chopper/ shredder and mulcher were distributed in all the villages.

ICAR-ATARI, Zone-1, Ludhiana

management, etc. to create awareness and to enhance farmers' income through adoption of subsidiary occupation. Under this scheme, total 3 training programmes per village for at least 50 trainees in each village were to be organized. A total of **139** training programmes were conducted in 25 villages. The total number of beneficiaries of these training programmes were **10076** farmers and farm women (Table 3.1.3.6).

Table 3.1.3.6: Village-wise training programmes organized by KVK, Ferozepur

S.No	Village (village code)	No. of Trainings	No. of farmers
1	Alfooke (247)	6	362
2	Baje Ke (300)	6	470
3	Bandala (328)	4	792
4	Chak Nidana (177)	4	257
5	Changali Qadim(136)	4	322
6	Dhana Shahid (338)	7	417
7	Dhira Pattra (217)	6	430
8	Fatuwala (89)	4	400
9	Jhok Harihar (215)	8	335
10	Karman (265)	5	383
11	Karmuwala (155)	6	411
12	Mahalam (33)	6	370
13	Malwal (201)	7	536
14	Mana Singhwala(203)	6	380
15	Mandiwal (171)	5	298
16	Markhai (355)	7	499
17	Nurpur (213)	6	452
18	Pandori Khatrian (333)	7	499
19	Phide (173)	1	58
20	Rasulpur (65)	5	242
21	Rode Jallewala (23)	8	513
22	Sadhuwala(337)	6	586
23	Tara Singhwala (226)	4	273
24	Thethar Kalan (159)	6	492
25	Warabhai (189)	5	299
	Total	139	10,076
*Target 75 trainings for 3750 trainees			
26	One 3 days training programme on Beekeeping, Mushroom cultivation and Nutrition gardening		70



Training programme on Bee keeping at KVK Ferozepur

3.1.3.9 NADEP Pits

Under Krishi Kalyan Abhiyan, NADEP compost pits/ vermi-compost units were prepared through KVKs and Department of Agriculture in 25 villages in Ferozepur at the rate of 20 pits/ village. As per the guidelines KVK constructed 300 pits in 15 villages. A total of 4793 waste decomposer bottles were also distributed to the farmers for effective functioning of these vermin-compost pits. State Department constructed 200 pits in rest of the ten villages for the farming families.



Construction of NADEP Pits in Ferozepur

ICAR-ATARI, Zone-1, Ludhiana

3.1.3.10 Integrated Farming System Demonstration and micro irrigation system

KVK Ferozepur conducted demonstrations on Integrated Farming System (IFS) and micro irrigation system for the farmers so that the natural resources could be used judiciously and effectively by the farmers. During KKA 32 demonstrations were carried out in Ferozepur district covering **972** farmers of 25 villages.



Scientist of the Kendra explaining about the fogger system (micro irrigation) in KVK Polyhouse

3.2 MOGA (Punjab)

3.2.1 About the district

3.2.1.1 Geography and Agriculture

Moga district came into existence as 17th district of Punjab on 24th November, 1995. The district falls under the jurisdiction of Ferozepur division. It is spread over in area of 2230 sq. km. contributing 4.42% area of Punjab state. The district falls in agro climatic zone VI (according to National classification) and Zone IV (according to State classification) characterized with alluvial soils. However, district Moga falls under Western Plain Region. Moga dist. lies in the South-West region of Punjab (Table 3.2.1.a).



Fig Moga District

The geographical area of Moga district is 2,23,410 hectares with 330 villages under five blocks. Moga district has 1,95,237 hectares as net irrigated area (Table 3.2.1.a).

Table 3.2.1.a: Area distribution in the district Moga

S. No.	Particulars	Area in hectare
1	Geographical area	2,23,410
2	Tehsil (Number)	4
3	Block (Number)	5
4	Villages (Number)	330
5	Area under forest	2575
6	Area under cultivation	1,95,237
7	Area under fruits	434
8	Area under vegetables	7,708
9	Total irrigated area	1,95,237 (100%)
(i)	Irrigation with canal water only	1190 (0.61%)
(ii)	Irrigation with tube-well only	1,03,634 (53.08%)
(iii)	Irrigation with canal and tube-well both	90,413 (46.31%)

Table 3.2.1.b: Major farming systems/enterprises (based on the analysis made by the KVK)

1		Farming system/enterprise
1	Irrigated (Tube well)	Rice-wheat +Dairy farming, Cotton-wheat +Dairy farming Vegetable cultivation +Dairy farming and Rice-Potato-Summer Moong
2	Irrigated (Canal)	Rice-wheat +Dairy farming, Vegetable cultivation +Dairy farming and Rice-Potato-Summer Moong

Soil Health

For improvement of soil there is need of green manuring, vermi-composting and improved techniques to conserve FYM and to incorporate the crop residues such as wheat paddy straw in the soil through developed mechanization.

Table 3.2.1.c: Soil type/s of district Moga

S. No	Soil type	Characteristics	Area in hectare
1.	Sierozems	Soil with pale grayish a horizon grading into a calcareous material at depth one feet or less.	1,70,000
2.	Desert Soils	Have a very thin light colored surface horizon, which is ordinarily underlain by calcareous materials, originated under sparse vegetation.	24,000

Major crops and varieties in the district

In district Moga, after rice-wheat cropping system, other dominant cropping system is rice-potato-summer moong. The details of crop varieties grown by farmers of district Moga are presented in Table 3.2.1 d.

Table 3.2.1.d: Area, Production and Productivity of major crops cultivated in the district (2017-18)

S. No	Crop	Area (000 ha)	Production (000 Tonnes)	Productivity (Qtls/ha)
1.	Wheat	175	924	52.80
2.	Rice	175	840	48.00
3.	Basmati	5.0	13.2	26.50
4.	Potato	5.3	122.5	231.2
5.	Cotton	0.4	2.4	6.00
6.	Oilseed	0.5	0.8	15.00

3.2.2 Action Plan of Krishi Kalyan Abhiyan

3.2.2.1 Action villages

Krishi Kalyan Abhiyan (KKA) was carried out in 25 villages each with a population of more than 1000 people. An Action Plan comprising specifically identified activities under various departments of the agriculture ministry was implemented to saturate these 25 villages in each district with these activities. The list of selected villages from five blocks under KKA is given in Table 3.2.2.1.

3.2.2.2 Coordination & Implementation of KKA

Various activities to promote best practices and enhance agriculture income were undertaken. The overall coordination and implementation in the 25 villages of a district was carried out by Krishi Vigyan Kendra of the district. The programmes of KKA in Moga district was successfully implemented with the collaboration of the team given in Table 3.2.2.2.

Table 3.2.2.1: Block wise selected villages in district Moga

S.No.	Block	Village name with village code
1	Moga I (3)	Dhurkot Kalan(49), Dosanjh (26) and Nawan Moga Urf Tarewala (54)
2	Moga II (3)	Chotian Kalan (2), Daulatpur Uncha (10) and Rattian (18)
3	Bagha Purana (3)	Hariawala (72), Maur Nauabad (133) and Nathewala (114)
4	Nihal Singh Wala (4)	Badhni Khurd (100), Lohara (169) Burj Hamira(146) and Gaziana (147)
5	Kot-Ise-Khan (12)	Chima (308), Chuhar Chak(318), Datewal (313), Dholewala (237), Kamalke (259/260) Kishangarh (144),Kokri Behniwal(283) Kokri Buttran (282), Mandar (185), PandoriAraian (251), Rehrwan (225), Talwandi Naubahar (312)

Table 3.2.2.2: Collaboration of different departments in the district Moga for KKA

S.No.	Duty assigned	In - Charge
1	State In-charge of Punjab	Sh. M.S. Dhillon, ITS
2	District In-charge	Sh. Harphool Bairwa, ASSO
3	Nodal Officer	Dr. Amandeep Singh Brar, PC, KVK Moga
Collaboration with other state departments		
4	Department of Agriculture and Farmers' Welfare	Sh. Harminderjit Singh and Sh. Paramjeet Singh Brar, Chief Agriculture Officer, Moga
5	Department of Animal Husbandry, Moga	Dr. Gurmit Singh, Deputy Director (Animal Husbandry) Moga
6	Department of Forestry, Moga	Sh. Balbir Singh, Forest Range Officer, Moga

3.2.3. Output under KKA

3.2.3.1 Distribution of soil health cards

In district Moga, to test soil health, Department of Agriculture and Farmers' Welfare, Moga under the guidance of Sh. Harminderjit Singh and Sh. Paramjeet Singh Brar, Chief Agriculture Officer collected soil samples from all selected 25 villages and **3032** soil health cards were distributed among the farmers (Table 3.2.3.1).



Distribution of Soil Health cards among the Farmers in Moga

ICAR-ATARI, Zone-1, Ludhiana

Table 3.2.3.1: Details of distribution of soil health cards and minikits of pulses

S.No.	Village (village code)	Target	Distribution of soil health cards	Distribution of pulses minikits#
1	Badhni Khurd(100)	150	150	18
2	Burj Hamira(146)	77	77	110
3	Chima (308)	70	70	25
4	Chotian Kalan (2)	180	312	155
5	Chuhar Chak(318)	110	110	25
6	Datewal (313)	110	110	25
7	Daulatpur Uncha (10)	132	329	155
8	Dholewala (237)	120	140	25
9	Dhurkot Kalan (49)	65	75	50
10	Dosanjh (26)	95	117	130
11	Gaziana (147)	71	71	60
12	Hariawala (72)	80	175	75
13	Kamalke (259/260)	70	70	25
14	Kishangarh (144)	131	131	60
15	Kokri Behniwal(283)	90	90	25
16	Kokri Buttran (282)	80	80	50
17	Lohara (169)	100	113	25
18	Mandar (185)	80	80	25
19	Maur Nauabad (133)	80	102	75
20	Nathewala (114)	85	81	75
21	Nawan Moga Urf Tarewala (54)	70	92	60
22	Pandori Araian (251)	130	130	25
23	Rattian (18)	105	147	155
24	Rehrwan (225)	80	80	25
25	Talwandi Naubahar (312)	100	100	50
	Total	2461	3032	1528

The target of mini-kits of pulses distribution per village was 60.



Distribution of Mini Kits of pulses in Moga

3.2.3.2 Distribution of mini kits of pulses

Under KKA, to promote diversification, income enhancement and nutritional security by growing pulses, Department of Agriculture and Farmers' Welfare, Moga under the guidance of Sh. H. Singh and Sh. P.S. Brar, CAO, mini kits of summer moong containing variety *IPM 02-03* of 4 kg each were distributed among the farmers of the selected villages (Table 3.2.3.1).

3.2.3.3 Bovine vaccination against Foot and Mouth Disease (FMD)

To prevent animals from foot and mouth disease, Department of Animal Husbandry, Moga, under the guidance of Dr. Gurmit Singh, Deputy Director (Animal Husbandry), 100 percent coverage of bovine vaccination was carried out for Foot and Mouth Disease (FMD) in all the 25 villages where **16,870** animals of **3046** farmers were vaccinated against the disease (Table 3.2.3.2).

Table 3.2.3.2: Details of village-wise vaccination for (FMD) and PPR of animals

S.No.	Village(village code)	Vaccinated against FMD#	Vaccinated against PPR #
1	Badhni Khurd(100)	950	72
2	Burj Hamira(146)	850	25
3	Chima (308)	526	80
4	Chotian Kalan (2)	550	10
5	Chuhar Chak(318)	842	24
6	Datewal (313)	330	5
7	Daulatpur Uncha (10)	488	190
8	Dholewala (237)	739	0
9	Dhurkot Kalan (49)	744	66
10	Dosanjh (26)	695	62
11	Gaziana (147)	900	28
12	Hariawala (72)	750	80
13	Kamalke (259/260)	544	360
14	Kishangarh (144)	1050	197
15	Kokri Behniwal(283)	596	110
16	KokriButtran (282)	854	90
17	Lohara (169)	650	160
18	Mandar (185)	650	16
19	Maur Nauabad (133)	850	62
20	Nathewala (114)	700	35
21	Nawan Moga Urf Tarewala (54)	681	8
22	Pandori Araian (251)	897	40
23	Rattian (18)	325	55
24	Rehrwan (225)	350	0
25	Talwandi Naubahar (312)	359	70
	Total	16,870	1845
#100% saturation was achieved in the selected villages for vaccination against FMD and PPR (Peste des Petits Ruminants also known as sheep and goat plague) of animals			

3.2.3.4 Vaccination against Sheep and Goat Plague (PPR)

To prevent sheep and goats from plague (Peste des Petits ruminants) Department of Animal Husbandry, Moga, under the guidance of Dr. Gurmit Singh, Deputy Director (Animal Husbandry), carried out the vaccination of **1845** sheep and goats of **86** farmers during the Abhiyan (Table 3.2.3.2).



PPR in Sheep and Goats in Moga

3.2.3.5 Artificial insemination (AI)

Artificial insemination in the animals was conducted free of cost for the selected villages. Department of Animal Husbandry got artificial inseminated 2239 animals in all selected 25 villages. The target set by the Ministry was 100 animals per village for AI for the villages of Aspirational district (Table 3.2.3.3).



Artificial insemination of animals

Table 3.2.3.3: Village-wise AI cases undertaken in the district Moga

S.No	Village (village code)	AI of Animals#
1	Badhni Khurd(100)	90
2	Burj Hamira(146)	60
3	Chima (308)	56
4	Chotian Kalan (2)	112
5	Chuhar Chak(318)	99
6	Datewa 1 (313)	64
7	Daulatpur Uncha (10)	76
8	Dholewala (237)	54
9	Dhurkot Kalan (49)	78
10	Dosanjh (26)	114
11	Gaziana (147)	41
12	Hariawala (72)	81
13	Kamalke (259/260)	68
14	Kishangarh (144)	41
15	Kokri Behniwal(283)	155
16	Kokri Buttran (282)	247
17	Lohara (169)	136
18	Mandar (185)	109
19	Maur Nauabad (133)	87
20	Nathewala (114)	120
21	Nawan Moga Urf Tarewala (54)	61
22	Pandori Araian (251)	101
23	Rattian (18)	63
24	Rehrwan (225)	75
25	Talwandi Naubahar (312)	51
	Total	2239
# 100 animals per village of AI was the target under KKA in these villages		

3.2.3.6 Distribution of Planting material

To promote forestry and horticulture in the Aspirational district Moga, under KKA, Department of Agro-Forestry, Moga, under the guidance of Sh. Balbir Singh, Forest Range Officer, Moga, distributed **12,315** plants of different species like deak, neem, shisham, toot, amrud, jamun, etc against the target of 12500 plants among the **2549** farmers of the selected villages (Table 3.2.3.4).

ICAR-ATARI, Zone-1, Ludhiana

Table 3.2.3.4: Village-wise distribution of planting material in district Moga

S.No	Village (village code)	No. of plants distributed#
1	Badhni Khurd(100)	730
2	Burj Hamira(146)	755
3	Chima (308)	304
4	Chotian Kalan (2)	200
5	Chuhar Chak (318)	180
6	Datewal (313)	300
7	Daulatpur Uncha (10)	500
8	Dholewala (237)	319
9	Dhurkot Kalan (49)	170
10	Dosanjh (26)	150
11	Gaziana (147)	180
12	Hariawala (72)	705
13	Kamalke (259/260)	200
14	Kishangarh (144)	680
15	Kokri Behniwal(283)	477
16	Kokri Buttran (282)	420
17	Lohara (169)	730
18	Mandar (185)	300
19	Maur Nauabad (133)	1155
20	Nathewala (114)	1375
21	Nawan Moga Urf Tarewala (54)	300
22	Pandori Araian (251)	685
23	Rattian (18)	600
24	Rehrwan (225)	225
25	Talwandi Naubaha r (312)	615
	Total	12315
<p>#:Horticulture/Forestry plants of Deak, Neem, Shisham, Toot, Amrud, Jamun were distributed under KKA in these villages at the rate of 5 plants per family for 100 families in the selected villages.</p>		



Distribution of Horticulture/Agro Forestry Plants in Moga

3.2.3.7 Distribution of Agricultural implements

To encourage farmers to incorporate crop residue and paddy straw in the soil and stop the burning of the straw, under KKA, under the guidance of Sh. H. Singh and Sh. P.S. Brar, CAO, 207 agricultural implements were distributed on subsidized rates (Table 3.2.3.5). Along with the distribution of the implements self-help groups/farmers groups (SHG/FGs) were formed and finances was made available to these groups for establishment of custom hiring centers in the villages. According to the requirement, Rs 10 Lakhs, Rs 25 Lakhs or Rs 40 Lakhs were deposited in the bank accounts of the newly formed SHGs/ FGs groups.

Table 3.2.3.5: Village-wise distribution of agricultural implements in the district Moga

S. No	Village (village code)	No. of farmers benefitted#
1	Badhni Khurd(100)	19
2	Burj Hamira(146)	12
3	Chima (308)	1
4	Chotian Kalan (2)	11
5	Chuhar Chak(318)	9
6	Datewal (313)	2
7	Daulatpur Uncha (10)	8
8	Dholewala (237)	6
9	Dhurkot Kalan (49)	3
10	Dosanjh (26)	2
11	Gaziana (147)	16
12	Hariawala (72)	15
13	Kamalke (259/260)	2
14	Kishangarh (144)	4
15	Kokri Behniwal(283)	7
16	Kokri Buttran (282)	10
17	Lohara (169)	17
18	Mandar (185)	0
19	Maur Nauabad (133)	9
20	Nathewala (114)	10
21	Nawan Moga Urf Tarewala (54)	19
22	Pandori Araian (251)	19
23	Rattian (18)	5
24	Rehrwan (225)	0
25	Talwandi Naubahar (312)	1
	Total	207
#: Against the target of distribution of 10 implements in each village, happy seeder zero till drill, super SMS, rotavator, paddy straw chopper/shredder and mulcher were distributed in all the villages		

3.2.3.8 Training programmes

Training programmes were conducted in each village by KVK for bee keeping, mushroom cultivation, vermi-composting and nutrition gardening, etc. to create awareness and to enhance their income through adoption of subsidiary occupation. Under this scheme, in district Moga, KVK scientists conducted **151** training programmes for the farmers. The total number of beneficiaries from these training programmes was **7,652** farmers during KKA (Table 3.2.3.6).

Table 3.2.3.6: Village-wise training programmes organized by KVK, Moga

S.No	Village (village code)	No. of Trainings*	No. of farmers
1	Badhni Khurd(100)	4	112
2	Burj Hamira(146)	9	648
3	Chima (308)	5	130
4	Chotian Kalan (2)	5	193
5	Chuhar Chak(318)	6	276
6	Datewal (313)	6	228
7	DaulatpurUncha (10)	3	159
8	Dholewala (237)	4	104
9	Dhurkot Kalan (49)	9	468
10	Dosanjh (26)	5	145
11	Gaziana (147)	9	612
12	Hariawala (72)	4	122
13	Kamalke (259/260)	9	684
14	Kishangarh (144)	10	780
15	Kokri Behniwal(283)	5	140
16	KokriButtran (282)	5	180
17	Lohara (169)	9	513
18	Mandar (185)	9	522
19	Maur Nauabad (133)	4	96
20	Nathewala (114)	4	100
21	Nawan Moga Urf Tarewala (54)	3	99
22	Pandori Araian (251)	9	486
23	Rattian (18)	3	114
24	Rehrwan (225)	9	675
25	Talwandi Naubahar (312)	3	66
	Total	151	7652
*Target 75 trainings for 3750 trainees			

Krishi Kalyan Abhiyan

Four training programmes of three days each on subsidiary occupations viz. vermicomposting, bee keeping, intergrated nutrition gardening and mushroom cultivation were also conducted at KVK, Moga in which farmers from these villages were trained. A total of **186** farmers received training from these four training programmes.



Training Programmes during Krishi Kalyan Abhiyan in Moga

3.2.3.9 NADEP Pits

Under KKA, NADEP compost pits/ vermi-compost units were set up through KVKs and also by Department of Agriculture and Farmers' Welfare in these 25 villages in Aspirational district Moga @ of 20 pits /village. KVK constructed 300 pits in 15 villages, rest by State department 200 pits in 10 villages for the farming families. For this purpose, the funds @ Rs. 7,000/- per NADEP compost pits/ vermi-compost units were



Construction of NADEP Pits in distt. Moga

transferred to beneficiary farmers through DBT.

3.2.3.10 Demonstration programmes on Micro-irrigation and integrated cropping practice

One demonstration unit on micro irrigation and integrated cropping practice was set

ICAR-ATARI, Zone-1, Ludhiana

up at KVK, Moga to familiarize farmers with the latest techniques and how these can be incorporated at the grass root level. In micro irrigation three training programmes were conducted in which **76** farmers participated. Components covered under integrated cropping system (IFS) were integrated weed management in paddy and maize crop, integrated nutrient management, integrated disease management, integrated pest management in paddy, basmati and maize crops, use of bio-fertilizer in paddy and basmati crops and seed treatment in basmati. A total of **438** farmers visited the IFS unit and **18** training programmes on IFS were conducted for the benefit of farmers.



Demonstration on Micro- irrigation and integrated cropping practice in KVK Moga

3.3 CHAMBA (Himachal Pradesh)

3.3.1 About the district

3.3.1.1 Geography and Agriculture

Chamba district is situated between north latitude 32° 11' 30" and 33° 13' 6" and east longitude 75°7' 32" and 77° 3' 30" with an estimated area of 6522 square kms and is surrounded on all sides by lofty hill ranges. The territory is wholly mountainous with altitude ranging from 2,000 to 21,000 feet. According to Planning Commission the Agro Climatic Zone for district Chamba is western himalayan region. The farmers of the district practice rainfed farming (Table 3.3.1.a).



Fig. Chamba District

3.3.2 Action Plan of Krishi Kalyan Abhiyan

3.3.2.1 Action villages

In district, Chamba 25 villages from 5 blocks were selected for the implementation of Krishi Kalyan Abhiyan (KKA) during the period of **1st June to 15th August, 2018**. Under Krishi Kalyan Abhiyan, the villages were selected with the help of Ministry of Rural Development for enhancing the income of farmers (Table 3.3.2.1).

Table 3.3.1.a: Major farming systems/enterprises

S. No	Farming system/enterprise
1	Maize/Veg - Wheat/Vegetables
2	Vegetable/Pulses - Wheat/ vegetables
3	Horti- Agri – Pastoral system, Silvi- Pastoral system
4	Horticulture, off season vegetables, protected cultivation, Mushroom product ion, Bee keeping, sheep, goatry

Table 3.3.1.b: Soil type/s

S. No	Soil type	Characteristics
1	Brown forest soils	Slightly acidic to neutral in reaction.
2	Humus and iron podozols	Soils are acidic in reaction and contain high amounts of organic matter. Sandy loam, sandy clay loam and clay loam textures are common. They are low in available phosphorus and high in potassium.
3	Alpine humus mountain skeletal soils	Soils are gravelly sandy loam to loam, usually high in organic matter and neutral in reaction. Available phosphorus and potassium are medium to high.

Table 3.3.1.c: Production and Productivity of major crops cultivated in the district (2016-17)

S. No	Area (ha)	Production (Qtls)	Productivity (Qtls /ha)
Apple standard	12893.31	95334.2	7.39
Plum	348.13	1392.7	4.00
Peach	160.64	923.0	5.75
Apricot	363.62	1435.6	3.95
Pear	325.85	2158.6	6.62
Cherry	7.23	37.0	5.12
Kiwi	2.59	52.0	20.10
Pomegranate	65.22	150.4	2.31
Persimmon	3.03	60.0	19.80
Vegetable crops			
Peas	1656	235410	142.15
Tomato	290	111420	384.20
Bean	312	44630	143.04
Onion	110	21520	195.63
Garlic	114	19780	173.50
Cabbage	183	53570	292.73
Cauliflower	49	15390	314.08
Cereals and pulses			
Paddy	2250	39000	17.33
Wheat	21500	412500	19.18
Pulses	2100	18500	8.81

3.3.2.2 Coordination & Implementation of KKA

The overall coordination and implementation of the programme in the 25 villages of a district was done by nodal agency Krishi Vigyan Kendra Chamba. Various central and state govt. agencies collaborated for the successful implementation of the activities during the Krishi Kalyan Abhiyan. The list of the officials of the district who collaborated for implementing the KKA in the district Chamba are presented in Table 3.3.2.2.

Table 3.3.2.1: Block wise selected villages of district Chamba.

S.No.	Block	Name of village with Code
1.	Tissa (3)	Sanwal (315), Shikari (416), Suala (487)
2.	Salooni (3)	Bhasua (170), Maura (102), Surgani (235)
3.	Bhatiyat (7)	Samleu (40), Kakira Jarai (160), Khanora (269) Sihunta Jarei (300A), Garnota (293), Chalera (311)Hatli (345)
4.	Chamba (10)	Baror (234), Sarol (282), Haripur (283), Kyani (286), Raj Nagar Khas (287), Rupani (288), Chaklu (305),Bhanauta (14), Udaipur Khas(16), Sach (20)
5.	Mehla (2)	Mangla (49), Phagri (65)

Table 3.3.2.2: List of officials deputed for KKA in district Chamba.

S. No.	Duty assigned	In-Charge
1	In-charge of Himachal Pradesh	Dr Tarsem Chand, CCS (1987), JS, Govt. of India
2	District In-charge	Sh. M. Jawahar, Deputy Agricultural Marketing Adviser
3	Nodal Officer	Dr. Rajeev Raina, Programme Coordinator, KVK Chamba
Collaboration with other state departments		
4	Department of Agriculture and Farmers' Welfare	Sh. Dharam Chand, Deputy Director Agriculture, Chamba
5	Department of Animal Husbandry	Dr. Ravi Parkash, Deputy Director Animal Husbandry
6	Department of Horticulture	Sh. K.L Sharma, Deputy Director Horticulture

3.3.3 Output under KKA

Various activities were implemented to promote best practices and enhance agriculture income of farmers at the village level were undertaken under this plan such as:-

3.3.3.1 Distribution of soil health cards

In district Chamba, to test soil health, Department of Agriculture and Farmers' Welfare, Chamba collected soil samples from selected villages and **8137** soil health cards were distributed among the farmers out of target 8130. A village-wise work done is presented in Table 3.3.3.1.



Distribution of Soil Health Cards in district Chamba

ICAR-ATARI, Zone-1, Ludhiana

Table 3.3.3.1: Details of distribution of soil health cards

S. No.	Village (village code)	Distribution of soil health cards
1	Baror (234)	277
2	Bhanauta (14)	314
3	Bhasua (170)	200
4	Chaklu (305)	318
5	Chalera (311)	298
6	Garnota (293)	282
7	Haripur (283)	458
8	Hatli (345)	360
9	Kakira Jarai (160)	359
10	Khanora (269)	249
11	Kyani (286)	319
12	Mangla (49)	474
13	Maura (102)	258
14	Phagri (65)	258
15	Raj Nagar Khas (287)	306
16	Rupani (288)	280
17	Sach (20)	327
18	Samleu (40)	468
19	Sanwal (315)	189
20	Sarol (282)	449
21	Shikari (416)	242
22	Sihunta Jarei (300A)	314
23	Suala (487)	238
24	Surgani (235)	442
25	Udaipur Khas (16)	458
	Total	8137

3.3.3.2 Bovine vaccination against Foot and Mouth Disease (FMD)

To prevent animals from foot and mouth disease, Department of Animal Husbandry, Chamba, carried out vaccination in 25 villages of the district in which **15368** animals of **9155** farmers were vaccinated against the disease (Table 3.3.3.2).

Table 3.3.3.2: Details of village-wise vaccination for FMD and PPR of animals

S. No.	Village (village code)	Vaccinated against FMD #	Vaccinated against PPR#
1	Baror (234)	638	350
2	Bhanauta (14)	760	80
3	Bhasua (170)	649	455
4	Chaklu (305)	521	152
5	Chalera (311)	150	300
6	Garnota (293)	464	180
7	Haripur (283)	545	200
8	Hatli (345)	481	228
9	Kakira Jarai (160)	228	24
10	Khanora (269)	615	498
11	Kyani (286)	700	25
12	Mangla (49)	655	80
13	Maura (102)	830	700
14	Phagri (65)	1050	3483
15	Raj Nagar Khas (287)	718	80
16	Rupani (288)	780	226
17	Sach (20)	930	200
18	Samleu (40)	215	150
19	Sanwal (315)	890	4970
20	Sarol (282)	510	200
21	Shikari (416)	770	900
22	Sihunta Jarei (300A)	425	400
23	Suala (487)	815	800
24	Surgani (235)	419	171
25	Udaipur Khas (16)	610	66
	Total	15368	14918
# 100% saturation was achieved in the selected villages for vaccination against FMD and PPR (Peste des Petits Ruminants also known as sheep and goat plague) of animals			

3.3.3.3 Vaccination against Sheep and Goat Plague (PPR)

To prevent sheep and goats from plague (Peste des Petits ruminants), Department of Animal Husbandry, Chamba carried 100 percent vaccination. During the Abhiyan **14918** animals of **10951** farmers were vaccinated against the disease (Table 3.3.3.2).



PPR in sheep and goat in Chamba

3.3.3.4 Artificial insemination (AI)

Under KKA, artificial insemination was free for the animals of selected villages. Department of Animal Husbandry, Chamba, inseminated **2504** animals in 25 villages against the target of **2500** animals in the district (Table 3.3.3.3).



Artificial insemination saturation in district Chamba

Table 3.3.3.3: Village-wise AI cases undertaken in district Chamba.

S. No	Village (village code)	AI of animals#
1	Baror (234)	101
2	Bhanauta (14)	100
3	Bhasua (170)	100
4	Chaklu (305)	100
5	Chalera (311)	100
6	Garnota (293)	101
7	Haripur (283)	101
8	Hatli (345)	100
9	Kakira Jarai (160)	100
10	Khanora (269)	100
11	Kyani (286)	100
12	Mangla (49)	100
13	Maura (102)	100
14	Phagri (65)	100
15	Raj Nagar Khas (287)	100
16	Rupani (288)	100
17	Sach (20)	101
18	Samleu (40)	100
19	Sanwal (315)	100
20	Sarol (282)	100
21	Shikari (416)	100
22	Sihunta Jarei (300A)	100
23	Suala (487)	100
24	Surgani (235)	100
25	Udaipur Khas (16)	100
	Total	2504
#100 animals per village of AI were attended under KKA in these villages		

3.3.3.5 Distribution of Planting Material

To promote forestry and horticulture in the Aspirational district Chamba, under KKA, Department of Agro-Forestry, Chamba, distributed 12500 plants of different species viz citrus, pecan nut, papaya, pomegranate among the 2500 farmers of 25

ICAR-ATARI, Zone-1, Ludhiana

villages. The target was achieved and village-wise achievements are presented in Table 3.3.3.4.

Table 3.3.3.4: Village-wise distribution of planting material in district Chamba

S. No.	Village (village code)	No. of plants distributed #
1	Baror (234)	500
2	Bhanauta (14)	500
3	Bhasua (170)	500
4	Chaklu (305)	500
5	Chalera (311)	500
6	Garnota (293)	500
7	Haripur (283)	500
8	Hatli (345)	500
9	Kakira Jarai (160)	500
10	Khanora (269)	500
11	Kyani (286)	500
12	Mangla (49)	500
13	Maura (102)	500
14	Phagri (65)	500
15	Raj Nagar Khas (287)	500
16	Rupani (288)	500
17	Sach (20)	500
18	Samleu (40)	500
19	Sanwal (315)	500
20	Sarol (282)	500
21	Shikari (416)	500
22	Sihunta Jarei (300A)	500
23	Suala (487)	500
24	Surgani (235)	500
25	Udaipur Khas (16)	500
	Total	12500

* #: Horticulture/Forestry plants of citrus, pecan nut, papaya, pomegranate were distributed under KKA in these villages at the rate of 5 plants per family for 100 families in selected villages



Distribution of plants to farmers in Chamba

3.3.3.6 Distribution of Agricultural Implements

During the Abhiyan the agricultural implements were distributed among the farmers to improve mechanization in hill farming. Implements like spade, plough, tubs etc. were distributed among the **505** farmers of the selected villages for improving agricultural production from hilly farms (Table 3.3.3.5).

3.3.3.7 Training programmes

To improve the skill and techniques in farming training programmes were conducted in each of 25 villages. KVK Chamba conducted training programmes on bee keeping, mushroom cultivation, vermi-composting, cultivation of fruits and vegetables etc. for the farmers. A total of **80** training programmes were conducted for **3833** farmers against the target of 75 training programmes to create awareness and to enhance their income through adoption of subsidiary occupation (Table 3.3.3.6).

Five training programmes on subsidiary occupations of three days each viz. vermi-composting, integrated crop management in apple and organic cultivation were also conducted at KVK, Chamba in which **75** farmers from selected villages participated for scientific know how about these occupations.



Training programs in Chamba during KKA

ICAR-ATARI, Zone-1, Ludhiana

Table 3.3.3.5: Village-wise distribution of Agricultural Implements in the district Chamba

S. No.	Village (village code)	No. of farmers #
1	Baror (234)	20
2	Bhanauta (14)	20
3	Bhasua (170)	20
4	Chaklu (305)	20
5	Chalera (311)	20
6	Garnota (293)	20
7	Haripur (283)	20
8	Hatli (345)	20
9	Kakira Jarai (160)	20
10	Khanora (269)	20
11	Kyani (286)	20
12	Mangla (49)	20
13	Maura (102)	20
14	Phagri (65)	20
15	Raj Nagar Khas (287)	20
16	Rupani (288)	20
17	Sach (20)	20
18	Samleu (40)	20
19	Sanwal (315)	20
20	Sarol (282)	20
21	Shikari (416)	20
22	Sihunta Jarei (300A)	20
23	Suala (487)	20
24	Surgani (235)	20
25	Udaipur Khas (16)	25
	Total	505
# Against the target of distribution of 10 implements in each village, spade, plough, tubs etc. were distributed in all the villages		

Table 3.3.3.6: Village-wise training programmes conducted in district Chamba.

S. No.	Village (village code)	*No. of Trainings	No. of farmers
1	Baror (234)	4	200
2	Bhanauta (14)	8	493
3	Bhasua (170)	1	30
4	Chaklu (305)	5	227
5	Chalera (311)	1	45
6	Garnota (293)	1	54
7	Haripur (283)	3	66
8	Hatli (345)	1	39
9	Kakira Jarai (160)	2	78
10	Khanora (269)	1	40
11	Kyani (286)	4	200
12	Mangla (49)	1	40
13	Maura (102)	6	102
14	Phagri (65)	3	165
15	Raj Nagar Khas (287)	4	240
16	Rupani (288)	4	160
17	Sach (20)	5	296
18	Samleu (40)	2	48
19	Sanwal (315)	5	376
20	Sarol (282)	4	200
21	Shikari (416)	6	312
22	Sihunta Jarei (300A)	1	44
23	Suala (487)	5	288
24	Surgani (235)	1	50
25	Udaipur Khas (16)	2	40
	Total	80	3833
*Target 75 trainings for 3750 trainees			

ICAR-ATARI, Zone-1, Ludhiana

3.3.3.8 Demonstration programmes on Micro- irrigation and Integrated cropping practice:

One demonstration unit on micro irrigation was set up at KVK, Chamba to familiarize farmers with the latest technique. The area covered under micro-irrigation at KVK, Chamba is 0.25 acre under vegetables and fruit crops. **Two** trainings on micro-irrigation and Integrated cropping practice were conducted in which **42** farmers participated.



Training and demonstration of Micro Irrigation System in KVK Chamba

3.3.3.9. NADEP Pits

KVK constructed 300 pits in 15 villages and State department constructed 200 pits in rest of the ten villages for the farming families.



Construction of NADEP Pits in district Chamba

3.4 BARAMULLA (Jammu & Kashmir)

3.4.1 About the district

3.4.1.1 Geography and Agriculture

Baramulla district is one of the 22 districts in state of Jammu and Kashmir. The district is situated at 34.1980° N longitude and 74.3636° E latitude, extending over an area of 4190 km², comprises of 524 villages (census villages). The town is located on the either banks of river Jhelum, about 55 Kms away from the capital city of Srinagar. The district was selected as Aspirational district by NITI Aayog during 2018. The other details regarding district are as follows.



Fig Baramulla district

Table 3.4.1.a: Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Agro-climatic Zone	Agro ecological situation
Western Himalayan Region (I)	Western Himalayas, Warm Sub humid (To Humid with Inclusion of per humid) Eco-Region

Table3.4.1.b: Major farming systems/enterprises

S. No	Farming system/enterprise
1	Rice-Brown Sarson- Rice-Fodder oat, Rice-Wheat

Table 3.4.1.c: Area, Production and Productivity of major crops cultivated in the district (2010-11)

S. No	Crop	Area (000 ha)	Production (000 tones)	Productivity (Qtls /ha)
1	Rice	21.145	84.5	42.0
2	Maize	22.145	17.7	8.00
3	Pulses	2.496	0.87	5.00
4	Oilseed	1.234	0.75	6.00
5	Fodder	1.263	5.00	125
Horticultural crops				
1	Apple	23.595	482.95	19.0
2	Pear	0.59	1.989	3.00
3	Walnut	0.207	6.720	2.00
4	Almond	0.120	0.003	10.0
5	Cherry	3.088	0.406	1.00

3.4.2 Action Plan of Krishi Kalyan Abhiyan

3.4.2.1 Action villages

Baramulla, district of the Jammu & Kashmir was selected for implementation of Krishi Kalyan Abhiyan. In district Baramulla 25 villages from three blocks were selected for implementing the activities of Krishi Kalyan Abhiyan during 1st June to 15th August 2018. The list of 25 villages was selected with the help of Ministry of Agriculture and Farmer's Welfare and Ministry of Rural Development is presented in Table 3.4.2.1.

Table 3.4.2.1: Block wise selected villages for Krishi Kalyan Abhiyan in district Baramulla.

S. No.	Block	Village name
1.	Sopore (9)	Adi Pora, Bulagam, Dhara Nambal, Rakh Haigam, Lalad, Muz Bug, Panji Pora, Puthka Kah Muqam ,Renji
2.	Rafiabad (5)	Chitlora, Dangi Wachha, Mala Guni Pora, Rawcha, Nathipora
3.	Zaingeer (12)	Bohri Pora, Gund Brat, Brat Kalan, Gori Pora Dhara Pora, Janwara, Logri Pora, Mala Mapan Pora, Mundji , Muqam Shaheed Mir, Rampora Rajpur, Watlab, Yamberzal Wari

3.4.2.2 Coordination and Implementation of KKA

The overall coordination and implementation of KKA in the 25 villages of a district was done by Nodal Agency Krishi Vigyan Kendra Baramulla. This KVK is working under administrative control of ICAR-CITH, Baramulla. The programme of KKA in district Baramulla was successfully implemented with the collaboration of the officials of concerned line departments and district development commissioner Baramulla (Table 3.4.2.2).

Table 3.4.2.2: List of officials deputed for KKA in district Baramulla.

S. No.	Name and Designation with Responsibility	Department
1.	Dr. Manoj Kumar, Programme Coordinator	KVK, Baramulla
2.	Dr, Nasir Ahmad Naqash, District Development Commissioner	District Baramulla
3.	Aijaj Ahmad Seikh, Chief Agriculture Officer	Agriculture Production Department
4.	Farooq Ahmad Tantray, Chief Horticulture Officer	Horticulture
5.	Dr. Mohmad Haider, District Sheep Husbandry Officer	Sheep Husbandry
6.	Dr. K M Kirmani, Chief Animal Husbandry Officer	Animal Husbandry

3.4.3 Output under KKA

3.4.3.1 Distribution of soil health cards

In district Baramulla, to test soil health KVK Baramulla and Department of Agriculture collected soil samples from selected 25 villages and **4879** soil health cards

were issued. This will help farmers to know the exact health condition of their soil and save excess expenditure by not using excess amount of fertilizers (Table 3.4.3.1).

3.4.3.2 Distribution of mini-kits of pulses

To improve the diversification in cropping pattern and soil health a total of **2148** mini kits of Kharif moong (1.5 kg) were distributed among the **1398** farmers of 26 villages of Baramulla district during Abhiyan (Table 3.4.3.1).

Table 3.4.3.1: Details of distribution of soil health cards and minikits of pulses

S.No.	Village	Target	Distribution of soil health cards	Distribution of pulses minikits#
1	Adipora	455	455	112
2	Bohripora	87	87	60
3	Brat	203	203	80
4	Bulagam	170	170	87
5	Chitlora	364	364	93
6	Danguwacha	258	258	86
7	Daranambal	194	194	62
8	Goripora Darapora	244	244	164
9	Gund Brat	131	131	110
10	Janwara	118	118	69
11	Lalad	184	184	41
12	Logripora	272	272	81
13	Mala Gunipora	131	131	58
14	Malamapampora	190	190	59
15	Mandji	214	214	69
16	Mazbugh	204	204	55
17	Muqam Shaheed Mir	80	80	55
18	Nathipora	298	298	111
19	Panjipora	156	156	75
20	Pathu Kah Muqam	390	390	156
21	Rakh Hygam	169	169	90
22	Rampora Rajpora	78	78	109
23	Rawcha	--	--	39
24	Renji	64	64	66
25	Watlab	138	138	73
26	Yamberzalwari	87	87	88
	Total	4879	4879	2148
#No target of mini-kits				

3.4.3.3 Bovine vaccination against Foot and Mouth Disease (FMD)

Department of Animal Husbandry, Baramulla carried out 100 percent bovine vaccination to prevent animals against Foot and Mouth Disease (FMD). In 25 villages, **8036** animals were vaccinated against this disease (Table 3.4.3.2).

3.4.3.4 Vaccination against Sheep and Goat Plague (PPR):

To prevent sheep and goats plague (Peste des Petits ruminants) Department of Sheep husbandry, carried out free vaccination of sheep and goat in which **20,000** animals were vaccinated against the disease of **6646** farmers during the Abhiyan (Table 3.4.3.2).

Table 3.4.3.2.: Details of village-wise vaccination for FMD and PPR of animals in district Baramulla.

S.No.	Village	Vaccinated against FMD#	Vaccinated against PPR#
1	Adipora	518	658
2	Bohripora	275	1383
3	Brat	382	767
4	Bulagam	254	763
5	Chitlora	395	799
6	Danguwacha	255	746
7	Daranambal	239	860
8	Goripora Darapora	150	733
9	Gund Brat	290	758
1	Janwara	450	860
11	Lalad	253	659
12	Logripora	207	837
13	Mala Gunipora	139	763
14	Malamapampora	415	812
15	Mandji	275	1201
16	Mazbugh	270	875
17	Muqam Shaheed Mir	170	713
18	Nathipora	238	906
19	Panjipora	380	662
20	Pathu Kah Muqam	247	668
21	Rakh Hygam	455	748
22	Rampora Rajpora	763	704
23	Renji	422	768
24	Watlab	270	694
25	Yamberzalwari	324	663
	Total	8036	20000
#: 100% saturation was achieved in the selected villages for vaccination against FMD and PPR (Peste des Petits Ruminants also known as sheep and goat plague) of animals			

3.4.3.5 Artificial insemination (AI)

Artificial insemination helps in improving the genetics of the herd. Under KKA, **2719** animals got artificial inseminated in all selected villages in district Baramulla by Department of Animal Husbandry (Table 3.4.3.3).

Table 3.4.3.3: Village-wise AI cases undertaken in district Baramulla

S. No.	Village	AI of Animals#
1	Adipora	122
2	Bohripora	69
3	Brat	150
4	Bulagam	203
5	Chitlora	156
6	Dangiwacha	106
7	Daranambal	69
8	Goripora Darapora	69
9	Gund Brat	89
10	Janwara	113
11	Lalad	112
12	Logripora	90
13	Mala Gunipora	71
14	Malamapampora	151
15	Mandji	135
16	Mazbugh	98
17	Muqam Shaheed Mir	106
18	Nathipora	89
19	Panjipora	108
20	Pathu Kah Muqam	68
21	Rakh Hygam	128
22	Rampora Rajpora	100
23	Renji	136
24	Watlab	77
25	Yamberzalwari	104
	Total	2719
#: 100 animals per village of AI were attended under KKA in these villages		

3.4.3.6 Distribution of Planting Material

To promote horticulture in the Aspirational district Baramulla, during KKA, the Department of Horticulture selected 2500 farm families from 25 villages and distributed 5 plants per family of improved variety of Apple crop and issued permits to **2500** farmers so that planting material was supplied during the planting season (Table 3.4.3.4).

Table 3.4.3.4: Village-wise distribution of planting material in the district Baramulla

S. No.	Village	No. of plants distributed#
1	Adipora	500
2	Bohripora	500
3	Brat	500
4	Bulagam	500
5	Chitlora	500
6	Danguwacha	500
7	Daranambal	500
8	Goripora Darapora	500
9	Gund Brat	500
10	Janwara	500
11	Lalad	500
12	Logripora	500
13	Mala Gunipora	500
14	Malamapampora	500
15	Mandji	500
16	Mazbugh	500
17	Muqam Shaheed Mir	500
18	Nathipora	500
19	Panjipora	500
20	Pathu Kah Muqam	500
21	Rakh Hygam	500
22	Rampora Rajpora	500
23	Renji	500
24	Watlab	500
25	Yamberzalwari	500
	Total	12500
#: Improved varieties of apple of were distributed under KKA in these villages		

3.4.3.7. Distribution of Agricultural Implements

To reduce the drudgery and cost of cultivation 167 beneficiaries were selected and permit for the different types of equipment/machinery such as mini tractor, power sprayer, tool kit (secateurs, kurpi & sickle) were issued to the farmers. The permits were issued to farmers as state department will distribute the implements as soon as the funds were received under KKA (Table 3.4.3.5).

Table 3.4.3.5: Details of Agricultural Implements distributed in villages

S. No.	Village	No. of farmers benefitted#
1	Adipora	6
2	Bohripora	3
3	Brat	3
4	Bulagam	6
5	Chitlora	19
6	Danguwacha	13
7	Daranambal	8
8	Goripora Darapora	7
9	Gund Brat	3
10	Janwara	6
11	Lalad	6
12	Logripora	5
13	Mala Gunipora	13
14	Malamapampora	8
15	Mandji	5
16	Mazbugh	8
17	Muqam Shaheed Mir	7
18	Nathipora	7
19	Panjipora	7
20	Pathu Kah Muqam	7
21	Rampora Rajpora	4
22	Renji	3
23	Watlab	6
24	Yamberzalwari	7
	Total	167
# Against the target of distribution of 10 implements in each village, mini tractor, power sprayer, tool kit (secateurs, kurpi, sickle) were distributed in all the villages		

3.4.3.8. Training programmes

Training programmes were conducted in each of the village by KVK for bee keeping, mushroom cultivation, vermi-composting, nutrition gardening, integrated nutrient management, integrated pest management, integrated farming system, paddy cultivation, cultivation of fruits and vegetables etc. to create awareness and to enhance the income of farmers and farm women through adoption of subsidiary occupation. The total number of beneficiaries from these 90 training programmes were 1167 farmers/farm women/rural youth of the district (Table 3.4.3.6).

Table 3.4.3.6: Village-wise training programmes organized by KVK, Baramulla

S. No.	Village	*No. of Trainings	No. of farmers trainees
1	Adipora	4	45
2	Bohripora	4	60
3	Brat Kalan	3	25
4	Bulgam	3	35
5	Chitloora	5	130
6	Dangiwacha	4	50
7	Daranambal	4	45
8	Goripora Darapora	4	55
9	Gund Brat	3	30
10	Janwara	3	40
11	Lalad	3	25
12	Logripora	3	30
13	Mala Gunipora	3	35
14	Mala Mapanpora	3	30
15	Mazbugh	3	25
16	Mukam Shaheed Mir	4	45
17	Mundji	4	80
18	Nathipora	3	35
19	Panjipora	3	30
20	Puth Kah Muqam	4	45
21	Rakh Hygam	3	35
22	Rampora Rajpura	2	25
23	Rawacha	4	77
24	Renji	4	60
25	Watlab	4	40
26	Yamberzalwari	3	35
	Total	90	1167
*Target 78 trainings for 3900 trainees			

Krishi Kalyan Abhiyan



Trainings conducted during KKA in district Baramulla

3.4.3.9. NADEP Pits

KVK Baramulla constructed 300 pits in 16 villages and State department constructed 220 pits in rest of the ten villages for the farming families.



Construction of NADEP pits in district Baramulla

3.5 KUPWARA (Jammu & Kashmir)

3.5.1 About the district

3.5.1.1 Geography and Agriculture:

Kupwara is the backward frontier district of Kashmir Valley. Dense forests and rich wild life make it significant from tourism and wildlife point of view. The district is situated at an average altitude of 5300 feet from the sea level. The geographical area of the district is 2379 sq.km. The North West part of the district is bound by line of actual control (L.O.C)) while the southern portion is bound by the district Baramulla. Kupwara district comprises of six blocks (Kralpora, Trehgam, Kupwara, Machil, Sogam and Qadir Abad).



Fig. Kupwara district

Table 3.5.1.a: Agro-climatic Zone & major agro ecological situations (based on soil & topography)

S. No.	Agro-climatic Zone	Agro-ecological situations	Characteristics
1	Temperate Wet and cold winter, Dry and moderately hot summer. Average precipitation 750 mm.	High Altitude	2000 mt
		Mid Altitude	1800-2000 mt (Maize main cereal crop, high potential for walnuts, rainfed farming)
		Low Altitude	1500-1800mt. (Paddy, Apple, Vegetable mostly irrigated farming)

Table 3.5.1.b: Major farming systems/enterprises.

S.No	Sowing window for 5 major field crops (start and end of normal sowing periods)	Rice	Maize	Pulses	Oil seeds
1.	Kharif-Rainfed		1 st week of April to 3 rd week of May	1 st week of May to 2 nd week of June	
2.	Kharif-Irrigated	2 nd week of April to 2 nd week of May	1 st week of April to 3 rd week of May	1 st week of May to 3 rd week of June	
3.	Rabi-Rainfed				1 st week of October to 2 nd week of October

Table 3.5.1.c: Soil type(s) of district Kupwara

S. No	Soil type	Characteristics	Area (ha)
1.	Clay loam	Fine textured soils, medium in organic matter and nutrients, water holding capacity/ percolation is more	56.36
2.	Sandy loam	Favorable for onion, potato and apple orchards	7.95

Table 3.5.1.d: Area, Production and Productivity of major crops cultivated in the district (2017-18)

S. No	Crop	Area (000 ha)	Production (000' t)	Productivity (q/ha)
1.	Paddy	15 .639	745	43.82
2.	Maize	25 .560	101	4.3
3.	Wheat	0.200	0.3	15.0
4.	Pulses	0.511	17.9	7.15
5.	Oilseeds	1.209	80	5.33
6.	Pea	0.305	150	5.0
7.	Vegetables	4.050	480	118.5
8.	Fodders	4.500	5870	130.44
9.	Apple	17 .367	1531.26	90
10.	Walnut	8.584	22 .5	28

3.5.2 Action Plan of Krishi Kalyan Abhiyan

3.5.2.1 Action Villages

In Jammu & Kashmir, district Kupwara was selected as Aspirational district during, 2018 by NITI Aayog. In Kupwara district 24 villages from six blocks were selected for the implementation of Krishi Kalyan Abhiyan. The Abhiyan was implemented during 1st June to 15th August, 2018. KVK Kupwara is under the administrative control of SKUAST-Srinagar. The block wise list of selected villages under KKA is presented in Table 3.5.2.1.

Table 3.5.2.1: Block wise selected villages of district Kupwara

S.No.	Block	Name of village
1.	Kralpora(6)	Aloosa, Bata Pora, Gundi Zuni Reshi ,Shoolora, Sunti Pora, Shumnag
2.	Trehgam(1)	Batter Gam
3.	Kupwara(4)	Buhi Pora, Chrali Gund, Dedi Koot, Push Wari
4.	Machil(4)	Dab Bal, Dudi, Machil, Misri Behak
5.	Sogam (5)	Doni Wari ,Tekiya Khurhama, Tung Check , Hayat Pora , Redi Nag
6.	Qadir Abad(4)	Hundi, Kawari, Ladriwan, Marhama

3.5.2.2 Coordination & Implementation of KKA

The overall coordination and implementation in the 24 villages of a district was done by Krishi Vigyan Kendra, Kupwara. The programme of KKA in Kupwara district was successfully implemented with the collaboration of the State Department of Agriculture, Department of Animal Husbandry, Department of Sheep Husbandry, Department of Forestry etc.

3.5.3 Output under KKA

3.5.3.1 Distribution of soil health cards

In district Kupwara, KVK collected soil samples from all selected 24 villages. This will help farmers to know the exact health condition of their soil and save excess expenditure by not using excess amount of fertilizers. The total number of **6005** soil health cards were distributed among the farmers of 24 villages during the Abhiyan (Table 3.5.3.1).

Table 3.5.3.1: Details of distribution of soil health cards and mini kits of pulses, oilseed and paddy

S. No.	Village	Target	Distribution of soil health cards	Distribution of pulses, oilseed and paddy minikits#
1	Aloosa	203	238	20
2	Bata Pora	307	307	25
3	Batter Gam	160	160	--
4	Buhi Pora	207	207	50
5	Chrali Gund	289	289	--
6	Dab Bal	207	207	--
7	Dedi Koot	150	150	--
8	Doni Wari	190	234	--
9	Dudi	160	160	--
10	Gundi Zuni Reshi	190	238	20
11	Hayat Pora	190	238	--
12	Hundi	122	375	--
13	Kawari	307	307	50
14	Ladriwan	276	276	40
15	Machil	179	309	50
16	Marhama	231	231	--
17	Misri Behak	307	307	30
18	Push Wari	225	225	--
19	Redi Nag	207	396	--
20	Shoolora	250	250	--
21	Shumnag	160	160	--
22	Sunti Pora	209	209	--
23	Tekiya Khurhama	225	225	--
24	Tung Check	307	307	20
	Total	5258	6005	325
#: No fixed target for distribution of mini-kits for the district Kupwara				

3.5.3.2 Distribution of mini-kits of cereals, pulses and oilseed

For diversification of farm crops among farmers of Kupwara district mini kits of Kharif Moong variety Shalimar-1 of 4 kg each, Paddy kit of 10 kg each and Rapeseed and Mustard of 2 kg each were distributed in 24 villages among **325** farmers during Krishi Kalyan Abhiyan in district Kupwara (Table 3.5.3.1).



Distribution of Mini Kits of pulses and oilseeds during Krishi Kalyan Abhiyan in Kupwara

3.5.3.3 Bovine vaccination against Foot and Mouth Disease (FMD)

To prevent animals from foot and mouth disease, Department of Animal Husbandry, Kupwara, carried out 100 percent coverage of bovine vaccination for Foot and Mouth Disease (FMD) in all the 24 villages where **12890** animals were vaccinated against the disease in the district (Table 3.5.3.2).



Vaccination of animals during Krishi Kalyan Abhiyan in Kupwara district

3.5.3.4 Vaccination against Sheep and Goat Plague (PPR)

To prevent sheep and goats from plague, Department of Animal Husbandry, Kupwara carried out vaccination of sheep and goat in which **23482** animals of **4064** farmers were vaccinated during the Abhiyan. A summary of work done is presented in Table 3.5.3.2.

ICAR-ATARI, Zone-1, Ludhiana



Vaccination of Sheep and Goat for eradication of Peste des Petits ruminants (PPR)

Table 3.5.3.2: Details of village-wise vaccination for FMD and PPR of animals

S. No	Village	Vaccinated against FMD#	Vaccinated against PPR #
1	Aloosa	303	649
2	Batapora	246	1261
3	Batter Gam	569	551
4	Buhi Pora	614	442
5	Chrali Gund	184	513
6	Dab Bal	989	802
7	Dedi Koot	354	569
8	Doni Wari	457	592
9	Dudi	906	993
10	Gundi Zuni Reshi	755	2146
11	Hayat Pora	334	946
12	Hundi	265	1028
13	Kawari	414	480
14	Ladriwan	550	661
15	Machil	1101	902
16	Marhama	230	932
17	Misri Behak	537	842
18	Push Wari	1135	3352
19	Redi Nag	234	642
20	Shoolora	243	798
21	Shumnag	759	1358
22	Sunti Pora	417	1806
23	Tekiya Khurhama	748	342
24	Tung Check	546	875
	Total	12890	23482
<p>#: 100 % saturation was achieved in the selected villages for vaccination against FMD and PPR (Peste des Petits Ruminants also known as sheep and goat plague) of animals</p>			

3.5.3.5 Artificial insemination (AI)

Artificial insemination saturation was free for all the animals in the selected villages during KKA. Department of Animal Husbandry, Kupwara, got **2619** animals inseminated in 24 villages of the farmers against the target of **2400** animals (Table 3.5.3.3).

Table 3.5.3.3: Village wise AI cases undertaken in the district Kupwara

S.No	Village	AI of Animals#
1	Aloosa	89
2	Batapora	73
3	Batter Gam	195
4	Buhi Pora	88
5	Chrali Gund	119
6	Dab Bal	39
7	Dedi Koot	119
8	Doni Wari	163
9	Dudi	46
10	Gundi Zuni Reshi	87
11	Hayat Pora	64
12	Hundi	214
13	Kawari	203
14	Ladriwan	214
15	Machil	49
16	Marhama	189
17	Misri Behak	53
18	Push Wari	51
19	Redi Nag	78
20	Shoolora	113
21	Shumnag	142
22	Sunti Pora	62
23	Tekiya Khurhama	84
24	Tung Check	85
	Total	2619
#: 100 animals per village of AI were attended under KKA in these villages		

3.5.3.6 Distribution of Planting Material

To promote forestry and horticulture in the Aspirational district Kupwara the department of agroforestry distributed **13500** plants of improved variety of Apple crop to farmers of the selected 24 villages. A detailed report is presented in Table 3.5.3.4.

ICAR-ATARI, Zone-1, Ludhiana

Table 3.5.3.4: Village-wise distribution of Planting Material in district Kupwara

S. No	Village	No. of plants distributed#
1	Aloosa	500
2	Bata Pora	500
3	Batter Gam	500
4	Chrali Gund	500
5	Dab Bal	500
6	Doni Wari	500
7	Dudi	500
8	Gundi Zuni Reshi	500
9	Hundi	500
10	Ladriwan	500
11	Machil	500
12	Marhama	700
13	Misri Behak	500
14	Push Wari	500
15	Redi Nag	500
16	Shoolora	500
17	Shumnag	500
18	Sunti Pora	500
19	Tekiya Khurhama	700
20	Tung Check	500
21	Buhi Pora	700
22	Dedi Koot	700
23	Hayat Pora	700
24	Kawari	1000
	Total	13500

#: Horticultural/Forestry plants of improved variety of apple were distributed under KKA in these villages at the rate of 5 plants per family for 100 families in the selected villages.



Distribution of plants during Krishi Kalyan Abhiyan in Kupwara

3.5.3.7 Distribution of Agricultural Implements

During Abhiyan agricultural implements were distributed to the farmers for improving the mechanization in hill farming. Implements like spade, bush cutter, sickle, secateurs etc. were distributed among **265** farmers of the 13 villages in Kupwara district (Table 3.5.3.5).

Table 3.5.3.5: Village-wise distribution of agricultural implements in district Kupwara

S.No	Village	No. of farmers benefitted #
1	Batter Gam	20
2	Charali Gund	15
3	Dab Bal	15
4	Dedi Koot	40
5	Gundi Zuni Reshi	10
6	hayat Pora	20
7	Hundi	15
8	Ladriwan	15
9	Machil	20
10	Shoolora	30
11	Shumnag	15
12	Sunit Pora	15
13	Tung Check	35
	Total	265

#: Against the target of distribution of 10 implements in each village, spade, bush cutter, sickle, secateurs etc. were distributed in thirteen villages

3.5.3.8 Training programmes

Training programmes were conducted in 19 villages by KVK for bee keeping, mushroom cultivation, vermi-composting, nutrition gardening, cultivation of fruits and vegetables etc. to create awareness and to enhance the income of farmers and farm women through adoption of subsidiary occupation. **Seventy three** training programmes for **817** trainee farmers were conducted by KVK Kupwara (Table 3.5.3.6).



Training on Bee Keeping at KVK Kupwara



Training on Nutrition Gardening at KVK Kupwara

ICAR-ATARI, Zone-1, Ludhiana

Table 3.5.3.6: Village-wise training programmes organized by KVK, Kupwara

S. No	Village	*No. of training programmes organized	No. of farmers attended
1	Aloosa	1	25
2	Bata Pora	3	60
3	Batter Gam	2	30
4	Buhi Pora	5	76
5	Chrali Gund	2	28
6	Dedi Koot	1	20
7	Gundi Zuni Reshi	1	15
8	Hayat Pora	1	9
9	Hundi	10	30
10	Ladriwan	7	100
11	Machil	2	35
12	Marhama	6	35
13	Push Wari	7	10
14	Redi Nag	2	45
15	Shoolora	2	35
16	Shumnag	6	9
17	Sunti Pora	4	20
18	Tekiya Khurhama	4	10
19	Tung Check	7	225
	Total	73	817

* Target 72 trainings for 3600 trainees

3.5.3.9 NADEP Pits

KVK Kupwara constructed 300 NADEP pits in all the 15 villages. State department constructed 180 pits in rest of the nine villages for the farm families during KKA.



Construction of NADEP Pits during KKA in Kupwara

3.6 HARIDWAR (Uttarakhand)

3.6.1 About the district

3.6.1.1 Geography and Agriculture: Haridwar district came into existence as district of Uttar Pradesh on 28th December 1988. Haridwar district, covers an area of about 2360 sq.km is in the western part of Uttarakhand state of India. Its latitude and longitude are 29.58° north and 78.13° east respectively. Due to Haridwar's strategic location on the bank of river Ganga, it has plenty of water resources and almost all kind of food grains are grown here in abundance.



Fig. Haridwar district

Table 3.6.1.a: Area distribution in the Aspirational district Haridwar.

Agro-climatic Zone	Characteristics	Agro ecological situation	Characteristics
Upper Gangetic Plain Region	Tarai and Bhabar	AES I Khanpur and Laksar	Water logged condition.
		AES II-Bhagwanpur, Bahadarabad (some parts)	Water table is very low.
		AES III Roorkee and Narsan	Irrigated

Table 3.6.1.b: Major farming systems/enterprises

S. No	Farming system/enterprise
1	Rice-Wheat, Mustard-Sugarcane-Ratoon-Wheat, Animal Husbandry.
2	Rice-Lentil, Animal Husbandry
3	Sugarcane-Ratoon-Wheat, Animal Husbandry
4	Sorghum-Urdbean/Moongbean, Animal Husbandry

Table 3.6.1.c. Area, Production & Productivity of major crops cultivated in the district (2016-17)

S. No.	Crop	Area (000 ha)	Production (000 Tonnes)	Productivity (qt/ha)
1	Sugarcane	50.140	3510	700.00
2	Wheat	46.438	136.003	29.29
3	Paddy	14.273	30.574	21.42
4	Groundnut	0.285	1.117	14.39
5	Maize	0.516	0.729	14.13
6	Lentil	0.326	0.343	10.52
7	Mustard	1.185	0.933	7.87
8	Sesamum	0.776	0.068	2.4
9	Urd	0.162	0.127	7.84
10	Gram	0.002	0.002	8.17

Table 3.6.1.d: Production and Productivity of livestock, poultry, fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	139,738		
Crossbred	72,030	Milk-564000 lit/day	Ave- 3.5 lit/day
Indigenous	67,708	-	-
Buffalo	2,72,566	-	Ave-4.0 lit/day
Poultry	47243	-	150 eggs/year/unit
Other animals	32582	-	-

3.6.2 Action Plan of Krishi Kalyan Abhiyan

3.6.2.1 Action villages

In Uttarakhand, district Haridwar was selected as Aspirational district during 2018. In Haridwar district 25 villages from six blocks were selected under Krishi Kalyan Abhiyan during 1st June to 15th August 2018 for implementing the activities. The detail of selected villages are presented in Table 3.6.2.1.

Table 3.6.2.1: Block wise selected villages for Krishi Kalyan Abhiyan in district Haridwar

S. No.	Block	Village Name
1	Laksar(2)	Akbarpur Ood, Alawalpur
2	Narson(8)	Basawa Khedi, Sadauli, BoodPur Chauhan, Lakhnauta, Manna Khedi, NaglaSalaroo, Shikarpur, Sikandarpur Mawal
3	Khanpur(3)	Khanpur, Karanpur, Jogawala
4	Bahadarabad(4)	Sahdevpur Shahwazpur, DaluwalaKalan, Mohd Begpur Urf Takabhari, NaglaKhurd
5	Roorkee (4)	Matlabapur, Rasoolpur, Sherpur, Sohalpur Gada
6	Bhagwanpur(4)	Sunethi Alampur, Tejupur, Mandawar Bahbalpur Hasuwala

3.6.2.2 Coordination & Implementation of Krishi Kalyan Abhiyan

The overall coordination and implementation of KKA in the 25 villages of a district was done by Krishi Vigyan Kendra of the district. The programme of KKA in Haridwar district was successfully implemented with the collaboration of the officers of Line Departments viz. CAO, CVO, DHO, PD-ATMA. Other officers of line departments who implemented KKA are given in Table 3.6.2.2.

Table 3.6.2.2: List of officials deputed for KKA in district Haridwar

S.No.	Duty assigned	In-Charge
1	State In-charge of Haridwar	Dr. Tarseen Chand, CSS , JS, Ministry of Agriculture, Govt of India, New Delhi
2	District In-charge, Haridwar	Mr. Nilesh Patil, Asstt. Director
3	Nodal Officer, Haridwar	Dr. Purushottam Kumar, PC, KVK Haridwar
4	Chief Vet. Officer , Haridwar	Dr. B C Karnatak
5	Chief Agriculture Officer, Haridwar	Dr. Vikesh Kumar Singh Yadav
6	Chief Horticulture Officer, Haridwar	Dr. Indrapal Singh Kushwaha

3.6.3 Output under KKA

3.6.3.1. Distribution of soil health cards

In district Haridwar, Department of Agriculture, Haridwar collected soil samples from all selected 23 villages and from 2 villages samples were collected and analyzed by KVK Haridwar and a total of **6743** soil health cards were distributed by KVK, Haridwar during the Abhiyan (Table 3.6.3.1).

3.6.3.2 Distribution of mini kits of oilseed and pulses

To improve the soil health and diversification in crops, Department of Agriculture and KVK Haridwar distributed the mini kits of 4 kg Sesamum (Punjab Til-2, RT-351)

Table 3.6.3.1: Details of distribution of soil health cards and minikits of pulses and oilseed.

SI. No.	Village	Target	Distribution of soil health cards	Distribution of pulse and oilseed minikits#
1	Akbarpur Ood	1142	1142	44
2	Alawalpur	519	519	20
3	Bahbalpur Hasuwala	310	310	24
4	Basawa Khedi	154	154	19
5	Bood Pur Chauhan	101	101	10
6	Daluwala Kalan	226	226	72
7	Jogawala	250	250	20
8	Karanpur	258	258	37
9	Khanpur	310	310	20
10	Lakhnauta	365	365	10
11	Mandawar	138	138	23
12	Manna Khedi	178	178	10
13	Matlabapur	149	149	14
14	Mohd Begpur Urf Takabhari	276	276	68
15	Nagla Khurd	329	329	17
16	Nagla Salaroo	167	167	05
17	Rasoolpur	220	220	69
18	Sadauli	258	258	20
19	Sahdevpur Shahwazpur	118	118	14
20	Sherpur	199	199	20
21	Shikarpur	336	336	07
22	Sikandarpur Mawal	282	282	20
23	Sohalpur Gada	171	171	18
24	Sunethi Alampur	171	171	20
25	Tejupur	116	116	26
	Total	6743	6743	627
#: No target for distribution of mini-kits				

ICAR-ATARI, Zone-1, Ludhiana

and pulses like Summer Moong (SM-421) and Urd (PU-31) among **627** farmers of the selected villages. A summary of achievements of this programme is given in Table 3.6.3.1.



Distribution of Mini Kits of pulses and oilseeds in Haridwar district

3.6.3.3. Bovine vaccination against Foot and Mouth Disease (FMD)

The department of Animal Husbandry, Haridwar, carried out the vaccination against Foot and Mouth Disease. Bovine vaccination for Foot and Mouth Disease (FMD) was carried in all the 25 villages where **12677** animals of **12677** farmers were vaccinated for FMD in all the villages as depicted in Table 3.6.3.2.

3.6.3.4 Vaccination against Sheep and Goat (PPR)

In district Haridwar, to prevent sheep and goats plague, Department of Animal Husbandry, Haridwar vaccinated sheep and goat flocks of **645** farmers in 25 villages against the disease. The details are mentioned in Table 3.6.3.2.

3.6.3.5 Artificial insemination (AI)

Artificial insemination programme was carried out by the Department of Animal Husbandry, Haridwar, under the guidance of Deputy Director (Animal Husbandry) .A total of **7409** animals got artificially inseminated in all 25 villages. A summary of the work done is presented in Table 3.6.3.3.

3.6.3.6. Distribution of Planting Material

To promote forestry and horticulture in the Aspirational district Haridwar, under KKA, department of Agro Forestry, Haridwar distributed **12500** plants of different fruits like Mango, Guava, Litchi and Pomegranate among the farmers of the selected 25 villages at the rate of 5 plants per family as given in Table 3.6.3.4.

Table 3.6.3.2: Details of village-wise vaccination for FMD and PPR of animals.

S. No.	Village	Vaccinated against (FMD)#	Vaccinated against PPR#
1	Akbarpur Ood	235	2
2	Alawalpur	222	15
3	Bahbalpur Hasuwala	909	19
4	Basawa Khedi	575	32
5	Bood Pur Chauhan	606	40
6	Daluwala Kalan	399	64
7	Jogawala	107	5
8	Karanpur	415	2
9	Khanpur	480	1
10	Lakhnauta	553	13
11	Mandawar	350	129
12	Manna Khedi	905	5
13	Matlabapur	397	34
14	Mohd Begpur Urf Takabhari	416	14
15	Nagla Khurd	491	32
16	Nagla Salaroo	856	17
17	Rasoolpur	233	35
18	Sadauli	621	28
19	Sahdevpur Shahwazpur	899	8
20	Sherpur	268	59
21	Shikarpur	508	14
22	Sikandarpur Mawal	785	6
23	Sohalpur Gada	297	40
24	Sunethi Alampur	890	21
25	Tejupur	250	10
	Total	12677	645

#: 100% saturation was achieved in the selected villages for vaccination against FMD and PPR (Peste des Petits Ruminants also known as *sheep and goat plague*) of animals

Table 3.6.3.3: Village-wise of AI cases undertaken in district Haridwar

S. No.	Village	AI of Animals#
1	Akbarpur Ood	300
2	Alawalpur	300
3	Bahbalpur Hasuwala	300
4	Basawa Khedi	295
5	Bood Pur Chauhan	300
6	Daluwala Kalan	296
7	Jogawala	300
8	Karanpur	300
9	Khanpur	300
10	Lakhnauta	293
11	Mandawar	300
12	Manna Khedi	280
13	Matlabapur	300
14	Mohd Begpur Urf Takabhari	293
15	Nagla Khurd	285
16	Nagla Salaroo	281
17	Rasoolpur	300
18	Sadauli	291
19	Sahdevpur Shahwazpur	300
20	Sherpur	300
21	Shikarpur	300
22	Sikandarpur Mawal	300
23	Sohalpur Gada	295
24	Sunethi Alampur	300
25	Tejupur	300
	Total	7409

#:100 animals per village of AI were attended under KKA in theses villages

Table 3.6.3.4: Village-wise distribution of plants in district Haridwar

S.No	Village	No. of plants distributed#
1	Akbarpur Ood	500
2	Alawalpur	500
3	Bahbalpur Hasuwala	500
4	Basawa Khedi	500
5	Bood Pur Chauhan	500
6	Daluwala Kalan	500
7	Jogawala	500
8	Karanpur	500
9	Khanpur	500
10	Lakhnauta	500
11	Mandawar	500
12	Manna Khedi	500
13	Matlabapur	500
14	Mohd Begpur Urf Takabhari	500
15	Nagla Khurd	500
16	Nagla Salaroo	500
17	Rasoolpur	500
18	Sadauli	500
19	Sahdevpur Shahwazpur	500
20	Sherpur	500
21	Shikarpur	500
22	Sikandarpur Mawal	500
23	Sohalpur Gada	500
24	Sunethi Alampur	500
25	Tejupur	500
	Total	12500

#: Horticulture/ Forestry plants of Mango, Guava, Litchi and pomegranate were distributed under KKA in these villages at the rate of 5 plant per family for 100 families in 25 selected villages

3.6.3.7. Distribution of Agricultural Implements

To encourage farmers to incorporate crop residue and paddy straw in the soil and to stop burning, agricultural implements were distributed on subsidized rates under Krishi Kalyan Abhiyan. The total of 500 agricultural implements like tiller, harrow, rotavator, cultivator, spray machine etc. were distributed among farmers of selected villages as presented in Table 3.6.3.5.

Table 3.6.3.5: Village-wise distribution of agricultural implements in district Haridwar

S. No	Village	No. of farmers benefitted#
1	Akbarpur Ood	20
2	Alawalpur	26
3	Bahbalpur Hasuwala	20
4	Basawa Khedi	22
5	Bood Pur Chauhan	20
6	Daluwala Kalan	20
7	Jogawala	20
8	Karanpur	20
9	Khanpur	20
10	Lakhnauta	20
11	Mandawar	20
12	Manna Khedi	10
13	Matlabapur	20
14	Mohd Begpur Urf Takabhari	20
15	Nagla Khurd	20
16	Nagla Salaroo	21
17	Rasoolpur	20
18	Sadauli	20
19	Sahdevpur Shahwazpur	20
20	Sherpur	20
21	Shikarpur	20
22	Sikandarpur Mawal	21
23	Sohalpur Gada	20
24	Sunethi Alampur	20
25	Tejupur	20
	Total	500
#: Against the target of distributed of 10 implements in each villages, sprayer, spray tank, tiller, harrow, rotavator, cultivator, spray machine were distributed in all the villages.		

3.6.3.8 Training programmes

Training programmes were conducted in each of the village by KVK for bee keeping, mushroom cultivation, vermi-composting etc. to create awareness and to enhance the income of farmers through adoption of subsidiary occupation. During KKA 2018, a total **182** training programmes were conducted in selected villages while the target for training programme was 75 and **9142** farmers were benefitted during the training programmes as depicted in Table 3.6.3.6.

Table 3.6.3.6: Village-wise training programmes organized by KVK, Haridwar

S.No.	Village	*No. of training programmes organized	No. of farmers benefitted
1	Akbarpur Ood	7	350
2	Alawalpur	7	350
3	Bahbalpur Hasuwala	7	350
4	Basawa Khedi	7	350
5	Bood Pur Chauhan	5	280
6	Daluwala Kalan	8	400
7	Jogawala	7	350
8	Karanpur	6	300
9	Khanpur	7	350
10	Lakhnauta	7	350
11	Mandawar	8	400
12	Manna Khedi	7	350
13	Matlabapur	7	350
14	Mohd Begpur Urf Takabhari	7	362
15	Nagla Khurd	7	350
16	Nagla Salaroo	7	350
17	Rasoolpur	10	500
18	Sadauli	9	450
19	Sahdevpur Shahwazpur	8	400
20	Sherpur	7	350
21	Shikarpur	8	400
22	Sikandarpur Mawal	8	400
23	Sohalpur Gada	7	350
24	Sunethi Alampur	7	350
25	Tejupur	7	350
	Total	182	9142
*75 trainings for 3750 trainees			

ICAR-ATARI, Zone-1, Ludhiana



Training programmes during KKA at KVK Haridwar

3.6.3.8 NADEP Pits

Under Krishi Kalyan Abhiyan, NADEP compost pit/vermi-compost units were set up through KVKs and Department of Agriculture in these 25 villages in Haridwar at rate of 20 pits/village. As per the guidelines KVK constructed 300 pits in 15 villages during KKA. State Department constructed 200 pits in rest of ten villages for the farming families and the target was achieved. The funds were provided to farmers through Direct Benefit Scheme to the farmers who constructed pits in their fields.

3.7 UDHAM SINGH NAGAR (Uttarakhand)

3.7.1 About the District

3.7.1.1 Geography and Agriculture:

Udham Singh Nagar (U.S. Nagar) district falls in the Terai region of Kumaon Division. The geographical area of the district is 3055 Km² and ranks 9th in Uttarakhand state. It is located between latitude 28° 53' N and 29° 23' N and laterally extends between longitudes 78° 45' E and 80° 08' E. The district is bounded by Nainital and Champawat districts of Uttarakhand on the north, Moradabad, Rampur, Bareilly and Philibhit districts of Uttar Pradesh on the south, Bijnor district of Uttar Pradesh on west and Nepal on the east. The district has been divided into 7 blocks and 7 tehsils, viz. Japsur, Kashipur, Bazpur, Gadarpur, Rudrapur, Sitarganj and Khatima with the district's headquarters at Rudrapur, the district has 669 inhabited villages.



Fig. U.S. Nagar district

Table 3.7.1.a: Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No.	Agro -Climatic Zone	Characteristics
1	Tarai and Bhabar (U.S. Nagar)	Western Himalyan Zone(1)
Agro-ecological situation		
1.	AES-I (Khatima and Sitarganj Block)	Soil loam and sandy loam, water logged condition, prone to flood, soil fertility medium, medium to deep soil, irrigated situation, and Paddy-Wheat and Paddy-Sugarcane crops grown.
2.	AES-II (Blocks covered-Bazpur, Gadarpur and Rudrapur)	Soil loam to clay loam, poor drainage, soil fertility medium to low, deep soil, irrigated situation, Paddy-Sugarcane, Paddy-Wheat, Paddy-Pea/Paddy-Potato, Paddy-Barseem crops grown.
3	AES-III (Blocks covered-Jaspur and Kashipur)	Soil sandy loam to clay loam, drainage problem, soil fertility low, medium to deep soil irrigated situation, Paddy-Wheat, Paddy-Sugarcane-Lahi-Wheat, Paddy-Sugarcane –lahi crops grown.

Table 3.7.1.b: Soil type(s) of district U.S Nagar

S.No.	Soil type	Characteristics
1.	Loam, sandy loam and clay loam	Soils of district U. S. Nagar is alluvial in nature, low to medium in phosphorus, medium to high in potassium and low to medium in organic matter. Deficient in zinc, rich in calcium carbonate. Drainage of soil is imperfect and water logging is great threat to the field crops.

Table 3.7.1.c: Production and productivity of livestock, poultry etc. in the district (Numbers)

Blocks	Cow			Buffaloes	Goats	Poultry
	Local	Crossbred	Total			
7	70356	53595	123951	175905	44514	997724

ICAR-ATARI, Zone-1, Ludhiana

Table 3.7.1.d: Area, Production, Productivity of major crops cultivated in the district

S. No	Crop	Area (000 ha)	Production (000tonnes)	Productivity (qt./ha)
1	Field Crops Including Oil Seeds and Pulses and Vegetables			
2	Paddy	98.565	310.108	31.46
3	Wheat	95.515	365.049	38.22
4	Sugarcane	41.372	234.200	566.0
5	Lentil	0.212	0.170	8.04
6	Mustard	5.003	4.277	8.55
7	Potato	0.589	5.565	113.01

Source: Department of Agriculture, U.S. Nagar

3.7.2 Action Plan of Krishi Kalyan Abhiyan

3.7.2.1 Action Villages

In Uttarakhand, district U.S. Nagar was selected under Aspirational district for implementing the activities in 25 villages from seven blocks during Krishi Kalyan Abhiyan. The list of selected villages blockwise is given in Table 3.7.2.1.

Table 3.7.2.1: Block-wise list of 25 selected villages for KKA of district U.S Nagar

S.No.	Name of Block	Name of Villages
1	Sitarganj (3)	Basgar, Matiha and Saronja
2	Kichha Tehsil (1)	Bhamraula
3	Khatima (6)	Biriya, Lohia Head Range, Majhola, Nadanna, Naugawanath and Sara Sariya
4	Gardarpur Tehsil (4)	Dhemri Block. Girdhar Nagar, Govindpur and Jaganpuri
5	Kashipur (3)	Firojpur, Kataiya and Manpur
6	Bajpur Tehsil (5)	Keshowala, Maholi Jangal, Ramjiwanpur Tanda Azam and Turka Gori
7	Jaspur Tehsil (3)	Manorathpur I, Raipur and Raipur Patti Dilla

3.7.2.2 Coordination & Implementation of KKA

The overall coordination and implementation in the 25 villages of a district was done by Krishi Vigyan Kendra of the district which is presently working under the jurisdiction of GBPUAT, Pantnagar, Uttarakhand. The programme of KKA in U.S. Nagar district was successfully implemented with the collaboration of the officers of Line Department viz. CAO, CVO, CHO and other officers designated from Ministry of Agriculture, Govt. of India, New Delhi in Table 3.7.2.2.

Table 3.7.2.2: List of officials associated with KKA in district U.S Nagar

S.No.	Name	Designation
1	Dr. Tarsem Chand	Jt. Secretary, Govt. of India
2	Mr. Ajay Kumar	Assistant Director/ District In-charge
3	Mr. Abhay Saxena	Chief Agriculture Officer, U.S.Nagar
4	Dr. Gopal S.Dhami	Chief Veterinary officer, U.S.Nagar
5	Dr. Rameshwar Singh	Chief Horticulture Officer, U.S.Nagar
6	Dr. C.Tiwari	Programme Coordinator, KVK, U.S.Nagar

3.7.3 Output under KKA

3.7.3.1 Distribution of soil health cards

To test soil health in district U.S. Nagar, soil samples were collected from all selected 25 villages by the officials of Department of Agriculture, U.S. Nagar and 4798 soil health cards were distributed to the farmers of 25 villages (Table 3.7.3.1).

3.7.3.2 Distribution of mini-kits of oilseed and pulses

Under Krishi Kalyan Abhiyan, to promote diversification, income enhancement and nutritional security by growing pulses and oilseeds, Department of Agriculture and KVK U.S. Nagar distributed mini kits of Soybean (PS-1225, PS-1347) 8 kg, Moong (HM-421) 4 kg, Arhar (PA-291) 4 Kg, and Til (RT-351) 1 kg to the famers of the 25

Table 3.7.3.1: Details of distribution of soil health cards and minikits of pulses

Sl.No	Village	Distribution of soil health cards	Distribution of oilseed and pulses minikit#
1	Basgar	125	45
2	Bhamraula	74	12
3	Biriya	361	12
4	Dhemri Block	309	0
5	Firojpur	92	29
6	Girdhar Nagar	310	0
7	Govindpur	372	42
8	Jaganpuri	107	0
9	Kataiya	84	21
10	Keshowala	144	24
11	Lohia Head Range	47	10
12	Maholi Jangal	130	21
13	Majhola	273	0
14	Manorathpur I	92	21
15	Manpur	62	13
16	Matiha	222	73
17	Nadanna	304	14
18	Naugawanath	285	10
19	Raipur	340	10
20	Raipur Patti Dilla	368	21
21	Ramjiwanpur	241	8
22	Sara Sariya	128	17
23	Saronja	180	34
24	Tanda Azam	148	16
25	Turka Gori	0	0
	Total	4798	453
#: No target of mini-kits for the district U.S.Nagar			

ICAR-ATARI, Zone-1, Ludhiana

selected villages. The total number of kits distributed during these programme were **453 kits** to the farmer's details are depicted in the Table 3.7.3.1.

3.7.3.3 Bovine vaccination against Foot and Mouth Disease (FMD)

In order to prevent animals from foot and mouth disease, Department of Animal Husbandry, U.S. Nagar, completed the 100 percent coverage of vaccination for Foot and Mouth Disease (FMD) in all the 25 villages. A village wise detail of vaccination is depicted in Table 3.7.3.2.

3.7.3.4 Vaccination against Sheep and Goat Plague (PPR)

To prevent sheep and goats from plague the Department of Animal Husbandry, U.S. Nagar completed 100 percent vaccination of 3284 number of sheep and goat. A village wise summary is given in Table 3.7.3.2.

Table 3.7.3.2: Details of village-wise vaccination for FMD and PPR of animals

S.No	Village	Vaccinated against FMD #	Vaccinated against PPR#
1	Basgar	262	190
2	Bhamraula	250	100
3	Biriya	550	153
4	Dhemri Block	821	102
5	Firojpur	395	71
6	Girdhar Nagar	335	82
7	Govindpur	403	145
8	Jaganpuri	235	26
9	Kataiya	638	60
10	Keshowala	250	50
11	Lohia Head Range	1200	584
12	Maholi Jangal	751	130
13	Majhola	570	260
14	Manorathpur I	95	99
15	Manpur	410	29
16	Matiha	432	133
17	Nadanna	600	123
18	Naugawanath	650	159
19	Raipur	269	12
20	Raipur Patti Dilla	400	85
21	Ramjiwanpur	275	200
22	Sara Sariya	450	65
23	Saronja	479	123
24	Tanda Azam	200	103
25	Turka Gori	320	200
	Total	11240	3284

#: 100% saturation was achieved in the selected villages for vaccination against FMD and PPR (Peste des Petits Ruminants also known as sheep and goat plague) of animals

3.7.3.5 Artificial insemination (AI)

Under KKA, artificial insemination saturation was free for the selected villages. Department of Animal Husbandry, U.S Nagar completed the AI work in all the 25 villages. A summary of the work done is presented in Table 3.7.3.3.

Table 3.7.3.3: Village-wise AI cases undertaken in the district U.S Nagar

S.No	Village	AI of Animals#
1	Basgar	110
2	Bhamraula	126
3	Biriya	118
4	Dhemri Block	108
5	Firojpur	143
6	Girdhar Nagar	136
7	Govindpur	112
8	Jaganpuri	104
9	Kataiya	159
10	Keshowala	141
11	Lohia Head Range	124
12	Maholi Jangal	109
13	Majhola	111
14	Manorathpur I	140
15	Manpur	171
16	Matiha	115
17	Nadanna	112
18	Naugawanath	102
19	Raipur	101
20	Raipur Patti Dilla	185
21	Ramjiwanpur	196
22	Sara Sariya	203
23	Saronja	101
24	Tanda Azam	104
25	Turka Gori	145
	Total	3276
#: 100 animals per village of AI were attended under KKA in these villages		

3.7.3.6. Distribution of Planting Material

To promote forestry and horticulture in the Aspirational district Haridwar, under KKA, Department of Agriculture U.S. Nagar distributed **12500** plants of mango varieties among the farmers of the selected villages. Farmers were sensitized and motivated for wide scale planting of horticultural plants at household level. A detailed report is depicted in Table 3.7.3.4.

ICAR-ATARI, Zone-1, Ludhiana

Table 3.7.3.4: Details of village-wise planting material distributed in district U.S. Nagar

S.No	Village	No. of plants distributed #
1	Basgar	500
2	Bhamraula	500
3	Biriya	500
4	Dhemri Block	500
5	Firojpur	500
6	Girdhar Nagar	500
7	Govindpur	500
8	Jaganpuri	500
9	Kataiya	500
10	Keshowala	500
11	Lohia Head Range	500
12	Maholi Jangal	500
13	Majhola	500
14	Manorathpur I	500
15	Manpur	500
16	Matiha	500
17	Nadanna	500
18	Naugawanath	500
19	Raipur	500
20	Raipur Patti Dilla	500
21	Ramjiwanpur	500
22	Sara Sariya	500
23	Saronja	500
24	Tanda Azam	500
25	Turka Gori	500
	Total	12500

#: Horticulture/ Forestry plants of Mango namely Dashari, langra, Chausa and Bombay green were distributed under KKA in these villages at the rate of 5 plants per family for 100 families in the selected 25 villages



Distribution of Plants during KKA in U.S. Nagar district

3.7.3.7. Distribution of Agricultural Implements

Agricultural Implements were distributed on subsidized rates during Krishi Kalyan Abhiyan. Agriculture Department provided **251** implements such as seed drill, thresher, harrow, zero till- drill, laser leveler, rotavator, cultivator, mould board plough, power sprayer machine to the farmers of 25 villages (Table 3.7.3.5).

Table 3.7.3.5: Village-wise distribution of agricultural implements in district U. S. Nagar

S.No	Village	No. of farmers benefitted #
1	Basgar	8
2	Bhamraula	16
3	Biriya	10
4	Dhemri Block	4
5	Firojpur	2
6	Girdhar Nagar	11
7	Govindpur	10
8	Jaganpuri	1
9	Kataiya	12
10	Keshowala	16
11	Lohia Head Range	8
12	Maholi Jangal	11
13	Majhola	10
14	Manorathpur I	9
15	Manpur	8
16	Matiha	6
17	Nadanna	9
18	Naugawanath	10
19	Raipur	4
20	Raipur Patti Dilla	15
21	Ramjiwanpur	14
22	Sara Sariya	16
23	Saronja	12
24	Tanda Azam	9
25	Turka Gori	20
	Total	251
#: Against the target of distribution of 10 implements in each village, Seed drill, thresher, harrow, zero till-drill, laser leveler, rotavator, cultivator, mould board plough, power sprayer machine were distributed in all the villages		

ICAR-ATARI, Zone-1, Ludhiana



Distribution of Agricultural Implements during KKA in U.S. Nagar

3.7.3.8 Training programmes

Training programmes were conducted in each of the village by KVK for bee keeping, mushroom cultivation, vermi-composting etc. to create awareness and enhance the income of farmers through adoption of subsidiary occupation. During KKA, a total of 75 training programmes were conducted in 25 selected villages benefitting 3207 farmers during the training programmes. Dept. of Agriculture organized specialized training of three days for farmers and farm women at GBPUAT, Pantnagar on bee keeping along with this the exposure visits to integrated farming system, drip irrigation, mushroom research centre and bee keeping research centre were also organized (Table 3.7.3.6).



Training programmes during KKA in district U.S. Nagar

Table 3.7.3.6: Village-wise training programmes organized by KVK U. S. Nagar

S.No	Village	No. of Trainings*	No. of farmers
1	Basgar	3	116
2	Bhamrola	3	125
3	Biriya	3	115
4	Dhemari Block	3	126
5	Firojpur	3	135
6	Girdharnagar	3	122
7	Govindpur	3	125
8	Jaganpuri	3	145
9	Kaitiaya	3	132
10	Keshowala	3	123
11	Lohiya Head Range	3	134
12	Maholi Jungle	3	129
13	Majhola 2	3	128
14	Manorathpur-1	3	117
15	Manpur	3	137
16	Matiha	3	144
17	Nadanna	3	130
18	Naugawanath	3	120
19	Raipur	3	128
20	Raipur Patti Dilla	3	119
21	Ramjeevanpur	3	126
22	Sara Saraiya	3	145
23	Saronja	3	127
24	Tanda Azam	3	128
25	Turka gauri	3	131
	Total	75	3207
*Target 75 trainings for 3750 trainees			

3.7.3.9 NADEP Pits:

Under Krishi Kalyan Abhiyan, KVK constructed 300 pits in 15 villages and rest 200 pits in 10 villages were constructed by State dept. of Agriculture.



Construction of NADEP Pits during KKA in Udham Singh Nagar

4. CONCLUSION

Krishi Kalyan Abhiyan (KKA) was launched in the Aspirational districts all over India in 112 districts to improve the production potential of agricultural crops and livestock with the aim to enhance the income of the farmers in these districts by Ministry of Agriculture and Farmers' Welfare. This Abhiyan was implemented with the collaboration and convergence of central and state level agencies. The activities of Abhiyan were uploaded daily through KVK Portal and the nodal agency for implementing this programme was Krishi Vigyan Kendra. The nine core activities were identified for implementation in the Aspirational districts to improve the agricultural income of farmers of these districts. The four states comprising of seven districts in Zone-I implemented this Abhiyan during 1st June to 31st July which was later extended to 15 August 2018 in the selected 25 villages of each district identified with the help of Ministry of Rural Development for the implementation of the activities.

The KKA was a well designed initiative as a convergence programme between state and central government agencies for improving the agriculture scenario of the Aspirational districts. But apart from distribution of soil health cards to farmers, training programmes for the farmers and making of NADEP pits others activities like distribution of mini-kits of pulses and oilseed and distribution of planting material should have been well planned and the importance of planting season should have been kept in mind. Further, artificial insemination of all the animals had been avoided as all the animals were not in the reproductive stage.

The demonstrations of Micro Irrigation and Integrated Farming System (IFS) were also the part of Abhiyan but in many KVKs micro irrigation system and IFS was not available so the activities could not be executed by the KVKs for the farmers.

At the end of Krishi Kalyan Abhiyan, out of seven Aspirational districts of Zone-I, four districts were placed at **number one** of Zone-1 for fulfilling the targets laid down by the Ministry of Agriculture and Farmers Welfare during Krishi Kalyan Abhiyan launched during **June 1 to 15 August 2018**.

4.1 Ranking of districts of ICAR-ATARI, Zone-I Ludhiana at the end of KKA

S. No	Name of State	Name of KVK	Ranking
1	Uttarakhand	Haridwar	1
2		U.S Nagar	1
3	Himachal Pradesh	Chamba	1
4	Punjab	Moga	10
5		Ferozepur	30
6	Jammu & Kashmir	Kupwara	1
7		Baramulla	19

5. LEARNING FROM KISAN KALYAN ABHIYAN

Krishi Kalyan Abhiyan was initiated to reach the farmers of aspirational districts at village level to apprise them about the new technologies and improving their skills in farming. The Abhiyan was a collaborative effort between the Central and State Government Agricultural and allied departments. Krishi Vigyan Kendras were selected as nodal agency for implementing this programme. The districts were provided with specified targets set by Ministry of Agriculture and Farmers' Welfare. The activities conducted/organised by the KVKs and other state departments of agriculture and animal husbandry were uploaded on the KVK Portal on daily basis so that each district's core activities can be monitored through dashboard by the Ministry.

The farmers were very enthusiastic about this Abhiyan and showed keen interest in all the nine activities undertaken during this Abhiyan. KVKs and the other departments worked untiringly to accomplish the targets. However, there were some problems encountered during the implementation of this Abhiyan. At many places, there was strong coordination among various departments and performed excellently. However, at few places, the coordination and cooperation was missing which resulted into poor ranking. Following are some of the important points which need to be focussed.

1. Diversification of crop was an important component of this Abhiyan, but the mini-kits of pulses and oilseed mini-kits were provided to the farmers without keeping season of the crops in mind. Therefore, the kits of crops should be provided according to the season. Similarly, department of Agroforestry provided the saplings to the farmers which would have been made available during the favourable season for plantation of the trees.
2. Farmers were reluctant to conduct NADEP pits as the recommended size 6 ft (length) x 4 ft (breadth) x 3 ft (height) was small which did not fulfil their requirements. There should be flexibility in the dimensions of NADEP pits.
3. During Abhiyan, one of the activities for KVKs was demonstration of Micro irrigation system to promote judicious use of water but all the KVKs of aspirational districts were not having micro irrigation system for demonstration. Therefore, efforts should be made to establish such facilities at KVKs so that farmers can be benefitted practically. Similarly, KVKs also conducted demonstrations on Integrated Farming System (IFS) but it could not be successfully demonstrated as the cropping season was over.

ICAR-ATARI, Zone-1, Ludhiana

4. Looking into the diverse activities of Krishi Vigyan Kendras, only training part should be allocated to the KVKs as it became very difficult for the implementation of other activities of Abhiyan with limited number of scientists available with the KVKs.
5. Convergence and support is must with all the concerned departments for the implementation of this programme and timely availability of quality inputs and funds for executing the Abhiyan is prerequisite for successful implementation. Efforts should be made to strengthen Convergence, Cooperation and Collaboration (3Cs) among departments which are the keys of success of such campaign.

ANNEXURE-I

Table: List of Joint Secretaries for overall supervision of implementation of Krishi Kalyan Abhiyan

SI No	Joint Secretary (In-charge)	State (No. of districts)	
1	Mrs. Upma Srivastava	Add. Secretary. Govt. of India, Ministry of Farm Welfare, Krishi Bhawan, New Delhi	
2	Sh M.S.Dhillon, ITS	Tamil Nadu (2), Punjab (2)	
3	Dr. Tarsem Chand, CSS (1987)	Uttrakhand- 2 Districts, Himachal Pradesh - 1 District, Haryana – 1 District	
4	Sh. S.K. Shrinivas, IAS (KL:1997)	Jammu & Kashmir	
	Name of DADF Officer	Name of Division	State
1	Dr. H.R Khanna	Livestock Health	Jammu & Kashmir, Himachal Pradesh, Haryana, Punjab and Uttarakhand

Distribution of Funds to the KVKs for construction of NADEP Pits during KKA implemented in 2018-19

S. No	Name of KVK	No. of Villages in which NADEP compost units to be set up	No. of NADEP compost units to be set up in each village	Total no. of NADEP compost units to be set up by each KVK	Total fund sanctioned for NADEP compost unit @ of Rs. 7000/- per unit
1	Ferozepur	15	20	300	21,00,000
2	Moga	15	20	300	21,00,000
	Total PAU, Ludhiana	30		600	42,00,000
3	Baramulla	15	20	300	21,00,000
	Total CITH Srinagar	15		300	21,00,000
4	Kupwara	15	20	300	21,00,000
	Total SKUAST-K, Srinagar	15		300	21,00,000
5	Chamba	15	20	300	21,00,000
	Total UHF, Solan	15		300	21,00,000
6	Haridwar	15	20	300	21,00,000
7	US Nagar	15	20	300	21,00,000
	Total GB PUAT, Pantnagar	30		600	42,00,000
Grand Total		105	140	2100	1,47,00,000

ANNEXURE-II

1. Distribution of Soil Health Cards during KKA

SL. No	Name of the KVK	Target	No. of villages	Farmers Benefitted	No. of Units
1	Ferozepur	2101	25	2677	2677
2	Moga	2461	25	3032	3032
3	Haridwar	6743	25	6743	6743
4	U.S. Nagar	4798	24	4798	4798
5	Kupwara	5260	24	6005	6005
6	Baramulla	4514	25	4879	4879
7	Chamba	8130	25	8137	8137
Total		34007	173	36271	36271

2. Distribution of Mini Kits of pulses and oilseeds or paddy during KKA

SL. No	Name of the KVK	Target	No. of villages	Farmers Benefitted	No. of Units
1	Ferozepur	2000	25	2298	2298
2	Moga	1500	25	1498	1528
3	Haridwar	0	25	647	627
4	U.S. Nagar	0	20	458	453
5	Kupwara	0	9	325	325
6	Baramulla	0	26	1398	2148
7	Chamba	0	25	108	108
Total		3500	155	6732	7487

3. Distribution of Horticulture/Agro Forestry/Bamboo plant @ 5 per family (location appropriate)

SL. No	Name of the KVK	Target	No. of villages	Farmers Benefitted	No. of Units
1	Ferozepur	12500	25	11529	20450
2	Moga	12500	25	2549	12315
3	Haridwar	12500	25	2500	12500
4	U.S. Nagar	12500	25	2500	12500
5	Kupwara	12000	24	3300	13500
6	Baramulla	12500	25	2500	12500
7	Chamba	12500	25	2500	12500
Total		87000	174	27378	96265

4. Making NADEP Pits in each village during KKA

SL. No	Name of the KVK	Target	No. of villages	Farmers Benefitted	No. of Units
1	Ferozepur	500 (20 per village)	15	300	300
2	Moga	500 (20 per village)	15	300	300
3	Haridwar	500 (20 per village)	15	300	300
4	U.S. Nagar	500 (20 per village)	15	300	300
5	Kupwara	480 (20 per village)	15	300	300
6	Baramulla	520 (20 per village)	16	300	300
7	Chamba	500 (20 per village)	15	300	300
Total		3500	106	2100	2100

5. 100% coverage of bovine vaccination (FMD) in each village during Abhiyan

SL. No	Name of the KVK	Target	No. of villages	Farmers Benefitted	No. of Units
1	Ferozepur	100% Saturation	25	15932	15932
2	Moga	100% Saturation	25	3046	16870
3	Haridwar	100% Saturation	25	12677	12677
4	U.S. Nagar	100% Saturation	25	4732	11240
5	Kupwara	100% Saturation	24	13033	12890
6	Baramulla	100% Saturation	25	8036	8036
7	Chamba	100% Saturation	25	9155	15368
Total			174	66611	93013

6. 100% coverage of Sheep and Goat for eradication of PPR during KKA

SL. No	Name of the KVK	Target	No. of villages	Farmers Benefitted	No. of Units
1	Ferozepur	100% Saturation	15	919	919
2	Moga	100% Saturation	23	86	1845
3	Haridwar	100% Saturation	25	645	645
4	U.S. Nagar	100% Saturation	25	658	3284
5	Kupwara	100% Saturation	24	4064	23482
6	Baramulla	100% Saturation	25	6646	20000
7	Chamba	100% Saturation	25	10951	14918
Total			162	23969	65093

ICAR-ATARI, Zone-1, Ludhiana

7. Artificial insemination saturation achievements during KKA

SL. No	Name of the KVK	Target	No. of villages	Farmers Benefitted	No. of Units
1	Ferozepur	2500 (100 animals per village)	25	1365	1361
2	Moga	2500 (100 animals per village)	25	925	2239
3	Haridwar	2500 (100 animals per village)	25	7409	7409
4	U.S. Nagar	2500 (100 animals per village)	25	3038	3276
5	Kupwara	2400 (100 animals per village)	24	2619	2577
6	Baramulla	2600 (100 animals per village)	25	2720	2719
7	Chamba	2500 (100 animals per village)	25	2504	2503
Total		17500	174	20580	22084

8. Training programmes conducted by KVKs during KKA

SL. No	Name of the KVK	Target	No. of villages	Farmers Benefitted	No. of Units
1	Ferozepur	75	25	10076	139
2	Moga	75	25	7652	151
3	Haridwar	75	25	9142	182
4	U.S. Nagar	75	25	3207	75
5	Kupwara	72	19	817	73
6	Baramulla	78	26	1167	90
7	Chamba	75	25	3833	78
Total		525	170	35894	788

9. Distributions of 10 to 20 agriculture implements per village during KKA

SL. No	Name of the KVK	Target	No. of villages	Farmers Benefitted	No. of Units
1	Ferozepur	250 (10 per village)	23	188	188
2	Moga	250 (10 per village)	24	250	250
3	Haridwar	250 (10 per village)	25	509	500
4	U.S. Nagar	250 (10 per village)	25	251	251
5	Kupwara	240 (10 per village)	13	265	265
6	Baramulla	260 (10 per village)	24	167	167
7	Chamba	250 (10 per village)	25	505	505
Total		1750	159	2135	2126

10. Demonstrations on Micro irrigation system and Integrated Farming System in KVKs during KKA

S. No.	Name of the KVK	Micro Irrigation				Integrated Farming System			
		No. of demo.	No. of Farmers visited	No. of Villages	No. of trainings	No. of demo.	No. of Farmers visited	No. of Villages	No. of trainings
1	Ferozepur	0	0	0	0	32	972	25	23
2	Moga	1	76	1	3	12	438	25	18
3	Haridwar	1	0	0	0	0	0	0	0
4	U.S. Nagar	0	0	0	0	0	0	0	0
5	Kupwara	0	154	10	3	0	35	3	3
6	Baramulla	0	0	0	0	0	0	0	0
7	Chamba	3	42	30	2	3	42	30	2
	Total	5	272	41	8	47	1487	83	46

Activities and achievements by seven KVKs of Zone 1

S. No.	Activities	No. of Villages	Achievements
1	Soil Health Card	173	36271
2	Mini Kits	155	6732
3	Horticulture/ Agro Forestry/ Bamboo plant	174	27378
4	NADEP Pits	106	2100
5	Artificial Insemination	174	20580
6	Agriculture Implements	159	2135
7	Training Programs	170	35894
8	Micro Irrigation	41	272
9	Integrated cropping	83	1487
10	Bovine Vaccine (FMD)	174	66611
11	Sheep and goat for eradication of PPR	162	23969
	Total Villages	1603	

ANNEXURE-III

Total activities carried out in seven KVKs during KKA-I

1.KVK Moga

S. No.	Activities	No. of Villages	Target	No. of Units	Farmer Benefitted
1	Soil Health Card	25	2461	3032	3032
2	Mini Kits	25	1500	1498	1528
3	Horticulture/ Agro Forestry/ Bamboo plant	25	12500	12315	2549
4	NADEP Pits	15	300	300	300
5	Artificial Insemination	25	2500	2239	925
6	Agriculture Implements	24	250	250	250
7	Training Programs	25	75	151	7652
8	Bovine Vaccine (FMD)	25	100%	16870	3046
9	Sheep and goat for eradication of PPR	23	100%	1845	86
10	Micro Irrigation	03	0	03	76
11	Integrated cropping	18	0	18	438
Total Villages		233		38521	19882

2.KVK Chamba

S. No.	Activities	No. of Villages	Target	No. of Units	Farmer Benefitted
1	Soil Health Card	25	8130	8137	8137
2	Mini Kits	25	0	108	108
3	Horticulture/Agro Forestry/ Bamboo plant	25	12500	12500	2500
4	NADEP Pits	15	300	300	300
5	Artificial Insemination	25	2500	2503	2504
6	Agriculture Implements	25	250	505	505
7	Training Programs	25	75	78	3833
8	Bovine Vaccine (FMD)	25	100%	15368	9155
9	Sheep and goat for eradication of PPR	25	100%	14918	10951
10	Micro Irrigation	0	0	0	0
11	Integrated cropping	0	0	0	0
Total Villages		215		54417	37993

3.KVK Ferozepur

S. No.	Activities	No. of Villages	Target	No. of Units	Farmer Benefitted
1	Soil Health Card	25	2101	2677	2677
2	Mini Kits	25	2000	2298	2298
3	Horticulture/ Agro Forestry/ Bamboo plant	25	12500	20450	11529
4	NADEP Pits	15	300	300	300
5	Artificial Insemination	25	2500	1361	1365
6	Agriculture Implements	23	250	188	188
7	Training Programs	25	75	139	10076
8	Bovine Vaccine (FMD)	25	100%	15932	15932
9	Sheep and goat for eradication of PPR	15	100%	919	919
10	Micro Irrigation	0	0	0	0
11	Integrated cropping	25	0	23	972
Total Villages		228		44287	46256

Krishi Kalyan Abhiyan

4.KVK Baramulla

S. No.	Activities	No. of Villages	Target	No. of Units	Farmer Benefitted
1	Soil Health Card	25	4514	4879	4879
2	Mini Kits	26	0	2148	1398
3	Horticulture/ Agro Forestry/ Bamboo plant	25	12500	12500	2500
4	NADEP Pits	15	300	300	300
5	Artificial Insemination	25	2600	2719	2720
6	Agriculture Implements	24	260	167	167
7	Training Programs	26	78	90	1167
8	Bovine Vaccine (FMD)	25	100%	8036	8036
9	Sheep and goat for eradication of PPR	25	100%	20000	6646
10	Micro Irrigation	0	0	0	0
11	Integrated cropping	0	0	0	0
Total Villages		216		50839	27813

5.KVK Kupwara

S. No.	Activities	No. of Villages	Target	No. of Units	Farmer Benefitted
1	Soil Health Card	24	5260	6005	6005
2	Mini Kits	9	0	325	325
3	Horticulture/ Agro Forestry/ Bamboo plant	24	12000	13500	3300
4	NADEP Pits	16	300	300	300
5	Artificial Insemination	24	2400	2577	2619
6	Agriculture Implements	13	240	265	265
7	Training Programs	19	72	73	817
8	Bovine Vaccine (FMD)	24	100%	12890	13033
9	Sheep and goat for eradication of PPR	24	100%	23482	4064
10	Micro Irrigation	10	0	03	154
11	Integrated cropping	03	0	03	35
Total Villages		190		59423	30917

6.KVK Haridwar

S. No.	Activities	No. of Villages	Target	No. of Units	Farmer Benefitted
1	Soil Health Card	25	6743	6743	6743
2	Mini Kits	25	0	627	647
3	Horticulture/ Agro Forestry/ Bamboo plant	25	12500	12500	2500
4	NADEP Pits	15	300	300	300
5	Artificial Insemination	25	2500	7409	7409
6	Agriculture Implements	25	250	500	509
7	Training Programs	25	75	182	9142
8	Bovine Vaccine (FMD)	25	100%	12677	12677
9	Sheep and goat for eradication of PPR	25	100%	645	645
10	Micro Irrigation	0	0	0	0
11	Integrated cropping	0	0	0	0
Total Villages		215		41583	40572

ICAR-ATARI, Zone-1, Ludhiana

7.KVK U.S. Nagar

S. No.	Activities	No. of Villages	Target	No. of Units	Farmer Benefitted
1	Soil Health Card	24	4798	4798	4798
2	Mini Kits	20	0	453	458
3	Horticulture/ Agro Forestry/ Bamboo plant	25	12500	12500	2500
4	NADEP Pits	15	300	300	300
5	Artificial Insemination	25	2500	3276	3038
6	Agriculture Implements	25	250	251	251
7	Training Programs	25	75	75	3207
8	Bovine Vaccine (FMD)	25	100%	11240	4732
9	Sheep and goat for eradication of PPR	25	100%	3284	658
10	Micro Irrigation	0	0	0	0
11	Integrated cropping	0	0	0	0
Total Villages		209		36177	19942

LIST OF CONTRIBUTORS

S. No.	Name of KVK	Name of Contributor	Designation of the Contributor
1	Ferozepur	Dr. Gurjant Singh Aulakh	Programme Coordinator
		Dr. Balwinder	SMS, Home Science
		Dr. Dimpy Raina	SMS, Horticulture
		Dr. Jagdeep Kaur	SMS, Plant Protection
2	Moga	Dr. Harsimranjeet Kaur Mavi	SMS (Farm Management)
		Dr. Amandeep Singh Brar	Programme Coordinator
3	Chamba	Dr. Rajeev Raina	Programme Coordinator
		Dr. Santosh Kumari	SMS, Veg. Science
		Dr. Renu Kapoor	SMS, Soil Science
		Dr. Anurag Sharma	SMS, Entomology
		Dr. Munish Thakur	SMS, Horticulture
4	Haridwar	Dr. Deepti	SMS (Plant Protection)
		Dr. Purushottam	Programme Coordinator
5	Baramulla	Dr. Manoj Kumar	Programme Coordinator
6	Udham Singh Nagar	Dr. C.Tiwari	Programme Coordinator
		Dr. Pratibha Singh	SMS, Home Science
		Dr. S.K.Sharma	SMS, Fisheries
7	Kupwara	Dr. Imtiaz	Programme Coordinator
		Dr. F.A Raina	SMS, Plant Protection
		Dr. Zahor	SMS, Floriculture
		Dr. Munir	Programme Asst.



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