

Priority Thrust Areas

- ✓ Crop Production
- ✓ Fruit Production
- ✓ Vegetable & Floriculture Cultivation
- ✓ Management of Dairy, Sheep and Poultry
- ✓ Women Empowerment
- ✓ Entrepreneurship Development

Summary of training programmes

Discipline	No. Of Courses		
	Farmers/Farm women	Rural Youths	Extension Personnel
Crop production	19	06	02
Horticulture production	33	24	08
Livestock production	16	04	05
Home Sciences	06	02	00
Plant Protection	28	00	04
Production of inputs at site	06	03	01
Soil health & fertility	12	04	04
Post harvest technology & value addition	00	03	00
Capacity building & group dynamics	00	06	03
Farm mechanization	06	00	00
Fisheries	00	03	00
Mushroom production	00	02	00
Bee-keeping	00	03	00
Sericulture	02	00	00
Total	128	60	27

Operational areas details proposed

S.No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Names of Cluster Villages identified for intervention
1.	Paddy	<ul style="list-style-type: none"> • Abiotic and biotic stress • Cold injury • Low yield • Nutrient imbalance 	Bragam, Kreri, Nowpora
2.	Maize	<ul style="list-style-type: none"> • Moisture stress • Lack of quality seed • Low productivity • Lack of IPM and INM 	Qammer, Thamankote, Rakhbrah & Bragam
3.	Brown Sarson	<ul style="list-style-type: none"> • Poor drainage • Higher seed rate • Incidence of aphids • Imbalanced nutrition • Old varieties 	Nambal, Srigufwara, Aakura
4.	Pulses	<ul style="list-style-type: none"> • Non availability of quality seed of SKUAST-K released varieties • Health consciousness 	Kreri, Nowpora, Bragam
5.	Fodder Oats	<ul style="list-style-type: none"> • Lack of quality seed • Imbalanced nutrition 	Kreri, Bragam, Nowpora
6.	Vegetables	<ul style="list-style-type: none"> • Incidence of chilli wilt, downy mildew of cucurbits • Lack of quality seed • Lack of knowledge about seed production • Shortage of vegetables during offseason 	Aarampora Mir Maidan & Banghdar
7.	Apple	<ul style="list-style-type: none"> • Lack of proper INM, IDM & IPM 	Kanalwan, Samthan, Saller, Madhama, Bijbhera

		<ul style="list-style-type: none"> • Improper plant propagation techniques • Russeting • Monocrop • Lack of pollinizers • Poor quality and yield 	
8.	Walnut	<ul style="list-style-type: none"> • Non descriptive cultivars • Higher gestation period • Poor quality & market due to traditional varieties • Lack of budded / grafted walnut 	Saller, Kuller, Khiram, Sirhama
9.	Floriculture	<ul style="list-style-type: none"> • Lack of awareness about commercial cultivation of cut-flowers under protected conditions • Lack of proper market chain 	Bragam, Kreri
10.	Dairy animals (Cross-Bred cows)	<ul style="list-style-type: none"> • Increased influence of Mastitis in cross bred cows • Milk fever • Repeated breeding • Lack of balanced ration and disease management • Increase in inter-calving period 	Bragam, Kreri, Nowpora
11.	Sheep	<ul style="list-style-type: none"> • Lack of feed & fodder management • Incidence of pre & post partum problems in sheep during winter • Lack of management in sheep production & nutrition during winter • Foot rot in sheep 	Bragam, Kreri, Nowpora
12.	Poultry	<ul style="list-style-type: none"> • Low body weight • Low egg production • Low feed conversion efficiency • Low Socio-Economic status 	Bragam, Kreri, Nowpora
13.	Honey Production	<ul style="list-style-type: none"> • Lack of disease management 	Bragum, Saller, Thamankot

		<ul style="list-style-type: none"> • Seasonal management • Migration management 	
14.	Dingri Mushroom	<ul style="list-style-type: none"> • Non-acceptability by the consumers 	Kreri
15.	Fisheries	<ul style="list-style-type: none"> • Lack of awareness about the proper selection of fish ponds • Lack of management of fish ponds with regards to feeding methods of Fry, Fingerlings & Adult fish 	Bragam,
16.	Sericulture	<ul style="list-style-type: none"> • Lack of awareness about high yielding races of silkworms for quality cocoon production • Lack of awareness about scientific worm rearing chambers 	Saller, Kullar, Ladhi, Karshangam
17.	Crops & enterprises	<ul style="list-style-type: none"> • Lack of knowledge on improved agricultural technologies in crops & livestock enterprise 	Kreri, Nowpora, Bragam
18.	SHGs	<ul style="list-style-type: none"> • Unemployment for young women 	Kreri, Nowpora, Bragam
19.	Resource related problem	<ul style="list-style-type: none"> • Less soil fertility due to non addition of organic manures & imbalanced nutrients • Erosion due to lack of soil and water conservation measures in sloppy areas 	Rakhbrah, Kreri, Nowpora, Bragam
	a. Soil		
	b. Multi-enterprise cropping system/ integrated cropping system	<ul style="list-style-type: none"> • Less income due to non adoption of crop diversification and enterprises in the existing cropping system 	Bragam, Samthan and Rakhbrah
20.	Rural Youth	<ul style="list-style-type: none"> • Decreased interest of rural youths in agriculture & allied enterprises • Lack of orientation on self employment avenues • Lack of capital for investment 	Kreri, Nowpora and Bragam

In order to address the aforementioned **prioritized problems** in various crops and enterprises, the following interventions are proposed in adopted cluster villages

On – Farm Testing during 2015-16

S. No.	Crop/ enterprise	Prioritized problem	Title of OFT	Technology options	Source of Technology	No. of trials	Parameters to be studied	Team members
1.	Apple	<ul style="list-style-type: none"> • Poor keeping and marketing quality • Physiological disorder 	Effect of different sources & concentrations of Calcium & Boron on yield & quality of apple	<p>T₁: Use of un-decomposed FYM, unbalanced and indiscriminate use of inorganic fertilizers (F P)</p> <p>T₂: 03 sprays of Boric acid @ 1.5 g/ltr sprayed at bud swell stage after petal fall & 21 days after second spray + 02 sprays of Calcium chloride @ 3g/ltr of water at 2-3 weeks interval after petal fall (R P)</p> <p>T₃: 04 sprays of CaCl₂</p>	SKUAST-K	03 (15 Apple trees each)	<ul style="list-style-type: none"> • Quality & Yield 	<ul style="list-style-type: none"> • Dr. Ab. Shakoor khanday SMS (Soil Sciences) • Dr. Ishtiyaq A. Khan SMS (Pomology)

				@ 3g/ltr starting from 3 weeks after petal fall + 4 sprays of Solubar @ 1.5 g/ltr at green tip stage, pink bud stage, one week after petal fall and 20-25 days after petal fall.				
2.	Apple	<ul style="list-style-type: none"> • Poor nutrient status of soil • Low economic yield • Health consciousness 	Role of organic fertilizer in quality enhancement of apple	<p>T₁: Unscientific use of manure and indiscriminate use of inorganic fertilizers, pesticides and fungicides (F P)</p> <p>T₂: Use of organic fertilizer (vermi-compost & compost) @ 4 kg per tree in 2:1 ratio at bud stage + Use of organic fertilizer (vermi-compost & compost) @ 3kg per tree in 2:1 ratio at peanut stage +Use of bio-pesticide</p>	National centre for organic farming(NCOF)	03 (15 trees each)	Quality & Yield	<p>Dr. I.J. Khan SMS (Organic Agriculture)</p> <p>Dr. Ab Shakoor Khanday SMS (Soil Science)</p>

				Vegetable oil, botanical fungicide, nitro-king, trichoderma species & bio-fertilizer (organic Ca & B , Panchgavya & jivanmruta at petal stage)} +Use of bio-fungicide (trichoderma sp.) at pea nut stage (R P)				
3.	Apple	• Russeting	Management of russeting in apple	<p>T₁: Use of non specific fungicides (F P)</p> <p>T₂: 2 -3 sprays of wettable Sulphur (7g) + Boric acid (1 g) + Kaolin clay (2g) per litre of water at 7-15 days interval starting from bloom stage. (R P)</p> <p>T₃: Application of Sulphur based fungicide (W P) instead of EC + T₂</p> <p>(Farmers feedback from</p>	SKUAST-K	03 (15 trees each)	Recovery (%)	<p>Dr. Ishtiyaq. A. Khan SMS (Pomology)</p> <p>Dr. M.A. Mantoo SMS</p> <p>(Plant Protection)</p>

				Madhama, Khiram and Fatehpora suggest that spray of ECs aggravate the problem rather than WPs)				
4.	Apple	Cracking of bark and stem followed by dieback	Management of canker in apple	<p>T₁: Mud plaster + covering trunk with paddy straw or polythene (F P)</p> <p>T₂: Copper carbonate + Red Lead + linseed oil in the ratio of 1:1:1.25 (Chaubattia Paint) (R P)</p> <p>T₃: Copper sulphate + Carbendazim + Linseed oil in the ratio of 1:2:7</p>	SKUAST-K	03 (15 trees each)	Disease (%)	<p>Dr. M.A. Mantoo SMS (Plant Protection)</p> <p>Dr. Ishtiyaq. A. Khan SMS (Pomology)</p>
5.	Apple	<ul style="list-style-type: none"> • Poor yield & quality of apple • Poor water holding capacity of soil 	Integrated nutrient management of fruit bearing apple trees (16 & above) on the basis of soil and	<p>T₁: Unscientific and erratic dose of organic and inorganic fertilizers. (F P)</p> <p>T₂: 40-60 kg/ha fully decomposed FYM +</p>	SKUAST-K	03 (15 apple trees each)	• Yield & economics	<ul style="list-style-type: none"> • Dr. Ab. Shakoor Khanday SMS (Soil Sciences) • Dr. Ishtiyaq A. Khan

			leaf test.	<p><i>Azotobacter</i> (Bio fertilizer) @ 1g per kg of fully decomposed FYM to improve fertilizer + Application of NPK on the basis of soil & leaf test analysis.</p> <p>(R P)</p> <p>T₃: Application of organic and inorganic fertilizers on the basis of soil and leaf test value.</p>				SMS (Pomology)
6.	Paddy	<ul style="list-style-type: none"> • Stunted & weak paddy nursery • Complete failure due to cold injury 	Management of paddy nursery against cold injury	<p>T₁: Sun drying + High seed rate + Application of common salt (F P)</p> <p>T₂: Recommended seed rate in 1m wide strips & any convenient length covered with polythene sheets placed on fixed willow sticks which look like tunnel (R P)</p> <p>T₃: T₂ + 20-30 cm medium or mixture</p>	SKUAST-K	03 (1 marla each)	•Healthy seedling %age	<ul style="list-style-type: none"> • Dr. I. J. Khan SMS (Organic Agriculture) • Dr. Ab. Shakoor Khanday SMS (Soil Sciences)

				prepared in the ratio of 2:2:1:1 of soil, sand, organic manure and ash respectively on polythene sheets				
7	Chilli	<ul style="list-style-type: none"> •Wilting of whole plant •Total loss 	Integrated management of chilli wilt	<p>T₁: No seed & seedling treatment + Frequent flood irrigation + Drenching with any available fungicide (F P)</p> <p>T₂: Seed and seedling treatment with Carbendazim 50 WP @ 0.1% +Need based irrigation + Drenching with Carbendazim 50 WP @ 0.1 % + Transplanting on ridges (R P)</p> <p>T₃ : T₂ + Seed and seedling treatment with bio pesticide. (tricoderma @20 gms/litre of water</p>	SKUAST-K	03 (2Marla Each)	<ul style="list-style-type: none"> •Disease incidence %age •Yield Qtls /ha 	<ul style="list-style-type: none"> • Dr. M.A. Mantoo SMS (Plant Protection) • Dr. I.J. Khan SMS (Organic Agriculture)

8	Cattle	<ul style="list-style-type: none"> • Incidence of milk fever • Low milk production 	Impact of mineral supplementation during transition period in cross bred cows	<p>T₁: Conventional feeding (F P)</p> <p>T₂: Treatment with absorbable calcium @ 21.5 g/day and absorbable P @ 20.3 g/day (Dietary Ca @ 0.45 % and P @ 0.23 %)</p>	National Research Council	03 (5 cattle each)	<ul style="list-style-type: none"> • Incidence of milk fever • Milk production • Mortality, if any 	<ul style="list-style-type: none"> • Dr. I. A. Mir SMS (Animal Science)
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Frontline Demonstrations

S. No.	Category	Crop/enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	No. of Demo	Parameters to be studied	Team members
1.	Cereals	Paddy (irrigated)	<ul style="list-style-type: none"> • Abiotic stress • Decreasing productivity of Jhelum due to biotic stresses • Low yield 	FLD on varietal introduction of Shalimar Rice-3 along with chemical weed management	Variety	Shalimar Rice-3	SKUAST-Kashmir	Seed	12 kg		5 (2 ha)	<ul style="list-style-type: none"> • Height of plant • Number of tillers/plant • Length of ear head • Grain yield • Seed weight (100 No's) 	<ul style="list-style-type: none"> • Dr. I.J.Khan SMS (Organic Agriculture) • Dr. Ab. Shakoor Khanday SMS (Soil Sciences)
2.		Maize	<ul style="list-style-type: none"> • Lack of quality seed • Low productivity • Lack of INM and IPM 	Demonstration on different varieties of maize along with ICM practices	Variety		SKUAST-Kashmir	Seed DAP Urea Potash Insecticide Weedicide	Inputs shall be supplied by Dryland (Karewa) Agricultural Research Station Budgam			<ul style="list-style-type: none"> • Days to 50 % flowering • No. of cobs per plant • Yield Qtl/ha 	<ul style="list-style-type: none"> • Dr. I.J.Khan SMS (Organic Agriculture) • Dr. M.A. Mantoo SMS (Plant Protection) • Dr. Ab. Shakoor Khanday SMS (Soil Sciences)

3	Oilseeds	Brown Sarson	<ul style="list-style-type: none"> Poor water management Higher seed rate Incidence of aphids Imbalanced nutrition of macro & micro nutrients 	Demonstration of Shalimar BS -1 together with ICM practices	Variety	Shalimar BS-1	SKUAST-Kashmir	<ul style="list-style-type: none"> Seed Sulphur DAP Potash Dimethoate 30 EC 	4 kg	200	20 (8ha)	Yield	<ul style="list-style-type: none"> Dr. I.J.Khan SMS (Organic Agriculture) Dr. M.A. Mantoo SMS (Plant Protection) Dr. Ab. Shakoor Khanday SMS (Soil Sciences)
4.	Pulses	Rajmash	<ul style="list-style-type: none"> Non-availability of quality seed Low yield 	Demonstration of local Rajmash as an intercrop with Maize	Variety	Wazij Razma	SKUAST-Kashmir	Seed	24 kg	3600	05	<ul style="list-style-type: none"> Disease % Yield Qtls/ha 	<ul style="list-style-type: none"> Dr. I.J.Khan SMS (Organic Agriculture) Dr. M.A. Mantoo SMS (Plant Protection) Dr. Ab. Shakoor Khanday SMS (Soil Sciences)
5.	Pulses	Moong	<ul style="list-style-type: none"> Health consciousness 	Demonstration on production of organic Moong	Variety	Shalimar Moong-1	NCOF (National Centre of Organic Farming)	<ul style="list-style-type: none"> Seed Vermicompost/compost 	0.5 kg/half k	75	05	<ul style="list-style-type: none"> Disease % Yield Qtls/ha 	<ul style="list-style-type: none"> Dr. I.J.Khan SMS (Organic Agriculture) Dr. Ab. Shakoor Khanday SMS (Soil Sciences)

								<ul style="list-style-type: none"> • Biofertilizers <p><i>Trichoderma viridae</i> (seed treatment)</p> <p><i>Rhizobium</i></p> <p><i>Azotobacter</i> or (Preflowering sprays)</p>	1 Litre	500			
6.	Livestock	Dairy animals (Cross-Bred cows)	<ul style="list-style-type: none"> • Increased influence of Mastitis in cross bred cows • Incidence of milk fever (Production Problem) • Increase in inter-calving period due 	<ul style="list-style-type: none"> • FLD on Impact of Vit A & E on mastitis & reproductive efficiency in cross bred cows 	-	-	SKUAST-Kashmir	<ul style="list-style-type: none"> • Vit A • Vit E 		400 400	03 of 05 cows each	<ul style="list-style-type: none"> • Incidence of mastitis • Milk production • Reproductive efficiency • Mortality, if any 	Dr. Ishtiyak A. Mir SMS (Animal Sciences)

			to imbalanced nutrition •FMD in cattle					•De-worming		350				
7.		Sheep	<ul style="list-style-type: none"> •Lack of feed & fodder management •Incidence of pre & post partum problems in sheep during winter •Lack of management in sheep production & nutrition during winter •Foot rot in sheep 	<ul style="list-style-type: none"> •FLD on Impact of feeding conc. supplementation during transition period in pregnant ewes 			SKUAST-Kashmir	<ul style="list-style-type: none"> •Conc. Diet •Vitamin E 	5kg per ewe	750	400	03 of 05 sheep each	<ul style="list-style-type: none"> •Birth weight of lamb •Growth rate •Mortality in lamb if any •Milk production •Reproductive disorders if any 	Dr. Ishtiyak A. Mir SMS (Animal Sciences)

8.		(Backyard Poultry) Krioler Chicks	<ul style="list-style-type: none"> •Low body weight •Low egg production •Low feed conversion efficiency •Low Socio-Economic status 	<ul style="list-style-type: none"> •FLD on impact of backyard poultry on the household nutrition of poor families 			SKUAST-Kashmir	Kroiler chicks	10	800	05	<ul style="list-style-type: none"> •growth rate •adult body weight •egg production •mortality •feed conversion efficiency 	Dr. Ishtiyak A. Mir SMS (Animal Sciences)
9.	Resource related problem	Soil	<ul style="list-style-type: none"> •Poor Soil health •High cost of chemical fertilizers 	Demonstration on vermicomposting	-	-	SKUAST-Kashmir	GIC Sheet	2 sheets	1000 (9 f x 3 f x 1.5 f)	10	<ul style="list-style-type: none"> • Quality of vermicompost 	<ul style="list-style-type: none"> •Dr. I.J.Khan SMS (Organic Agriculture) • Dr. Ab Shakoor Khanday SMS (Soil Science)
								Earthworms	2 kg	1000			
10.		Fodder	<ul style="list-style-type: none"> • Nutrient deficiency 	Demonstration on <i>Azolla</i>	-	-	NCOF (National Centre of Organic Farming)	HDPE	10 ft ²	1000	10	Yield of milk	<ul style="list-style-type: none"> •Dr. I.J.Khan SMS (Organic Agriculture) • Dr. Ishtiyaq Ahmad Mir SMS (Animal Science)
								Seed	2 kg	200			

11.		Plant	<ul style="list-style-type: none"> •Nutrient deficiency 	Demonstration on Vermiwas h			NCOF (National Centre of Organic Farming)	Tank	1 (100 litre)	500	05	Nutrient composition	<ul style="list-style-type: none"> •Dr. I.J.Khan SMS (Organic Agriculture) • Dr. Ab Shakoor Khanday SMS (Soil Science)
								Earthworms	1 kg	500			
12.	Others (Forage Crops)	Fodder Oats	<ul style="list-style-type: none"> •Non-availability of quality seed •Imbalanced macro nutrients 	Demonstration of Shalimar Fodder Oat-1	Variety	Shalimar Fodder Oat-1	SKUAST-Kashmir	Seed	40 kg	2000	15	<ul style="list-style-type: none"> •Height •Forage Yield Qtls/ha 	<ul style="list-style-type: none"> •Dr. I.J.Khan SMS (Organic Agriculture) •Dr. Ab. Shakoor Khanday SMS (Soil Sciences) •Dr. I.A. Mir SMS (Animal Sciences)

Training for Farmers/ Farm Women during 2015-16

S.No	Thematic area	Crop / Enterprise	Major problem	Training Course Title**	No. of Courses	Month	Names of the team members involved
1.	Crop Production	Paddy	<ul style="list-style-type: none"> • Abiotic and biotic stress • Cold injury • Low yield • Nutrient imbalance 	<ul style="list-style-type: none"> • Integrated crop management practices • Integrated management of diseases • Modified protected nursery management in paddy • Strategy for keeping farmers own seed 	07	April - August	<ul style="list-style-type: none"> • Dr. I.J.Khan SMS (Organic Agriculture) • Dr. M.A. Mantoo SMS (Plant Protection) • Dr. Ab. Shakoor Khanday SMS (Soil Sciences)
		Maize	<ul style="list-style-type: none"> • Moisture stress • Lack of quality seed • Low productivity • Lack of IPM and INM 	<ul style="list-style-type: none"> • Seed production technology • Moisture conservation techniques in rainfed maize • Maize production technology 	06	April - August	<ul style="list-style-type: none"> • Dr. I.J.Khan SMS (Organic Agriculture) • Dr. Ab. Shakoor Khanday SMS (Soil Sciences) • Dr. M.A. Mantoo SMS (Plant Protection)
		Brown sarson	<ul style="list-style-type: none"> • Poor drainage • Higher seed rate • Incidence of aphids • Imbalanced nutrition • Old varieties 	<ul style="list-style-type: none"> • Integrated crop management practices to enhance yield & oil content in brown sarson 	03	October	<ul style="list-style-type: none"> • Dr. Ab. Shakoor Khanday SMS (Soil Sciences)
		Pulses	<ul style="list-style-type: none"> • Non availability of quality seed of SKUAST-K released varieties • Health consciousness 	<ul style="list-style-type: none"> • Scientific technology of pulses with special reference to Rajmash and Moong 	02	April - June	<ul style="list-style-type: none"> • Dr. I.J.Khan SMS (Organic Agriculture) • Dr. Ab. Shakoor Khanday SMS (Soil Sciences)
		Fodder Oat	<ul style="list-style-type: none"> • Lack of quality seed • Imbalanced nutrition 	<ul style="list-style-type: none"> • Fodder production technology with special reference to Oats 	01	October - April	<ul style="list-style-type: none"> • Dr. I.J.Khan SMS (Organic Agriculture) • Dr. Ab. Shakoor

							Khanday SMS (Soil Sciences)
2.	Horticulture Production	Apple	<ul style="list-style-type: none"> • Lack of proper INM, IDM & IPM • Russeting • Monocrop • Lack of pollinizers • Poor quality and yield 	<ul style="list-style-type: none"> • Layout & management of apple orchards, awareness about high density plantation • Management of physiological disorders in apple • Scientific Training & pruning to improve quality and productivity in apple • Scientific grading and packaging • Pollination management in temperate fruit crops 	03	November – April	<ul style="list-style-type: none"> • Dr. Ishtiyag A. Khan SMS (Pomology)
					02	April – August	<ul style="list-style-type: none"> • Dr. Ab. Shakoor Khanday SMS (Soil Sciences)
					03	November	<ul style="list-style-type: none"> • Dr. M.A. Mantoo SMS (Plant Protection)
					03	October	
					03	April	
		Fruits	<ul style="list-style-type: none"> • Improper plant propagation and nursery raising practices 	<ul style="list-style-type: none"> • Scientific nursery raising of fruit crops and rejuvenation of old orchards with high density plantation 	03	February-March	<ul style="list-style-type: none"> • Dr. Ishtiyag A. Khan SMS (Pomology)
		Walnut	<ul style="list-style-type: none"> • Non descriptive cultivars • Higher gestation period • Poor quality & market due to traditional varieties • Lack of budded / grafted walnut 	<ul style="list-style-type: none"> • Propagation techniques in walnut • Awareness about cultivation of high density budded/grafted walnuts under protected conditions 	02	February-March	<ul style="list-style-type: none"> • Dr. Ishtiyag A. Khan SMS (Pomology)
					02	February-March	
					02	February-March	
		Floriculture	<ul style="list-style-type: none"> • Lack of awareness about commercial cultivation of cut-flowers under protected conditions • Lack of proper market chain 	<ul style="list-style-type: none"> • Production and management technology of cut flowers (Lillium, Carnation and Gladiolus) • Cultivation of lavender as an intercrop and also as a rainfed crop • Post harvest management of important cut flowers 	02	April-	<ul style="list-style-type: none"> • Dr. Ishtiyag A. Khan SMS (Pomology)
					02	June	<ul style="list-style-type: none"> • Dr. M.A. Mantoo SMS (Plant Protection)
					02	December	<ul style="list-style-type: none"> • Dr. I.J.Khan SMS (Organic Agri)
					02	October	
					02	March	
		Olericulture	<ul style="list-style-type: none"> • Incidence of chilli wilt, downy mildew of cucurbits • Lack of quality seed • Lack of knowledge about seed production 	<ul style="list-style-type: none"> • Nursery raising, seed treatment, seed extraction drying and seed storage • Exploitation of underutilized vegetables for diversification and 	02	February-March	<ul style="list-style-type: none"> • Dr. Ishtiyag A. Khan SMS (Pomology)
					02	April – October	<ul style="list-style-type: none"> • Dr. Ab Shakoor Khanday SMS

			<ul style="list-style-type: none"> •Shortage of vegetables during offseason 	enhancement in farm income.	02	May	(Soil Sciences) <ul style="list-style-type: none"> •Dr. M.A. Mantoo SMS (Plant Protection)
3.	Livestock Production	Dairy animals (Cross-Bred cows)	<ul style="list-style-type: none"> •Increased influence of Mastitis in cross bred cows •Milk fever • Repeated breeding •Lack of balanced ration and disease management • Increase in inter-calving period 	<ul style="list-style-type: none"> •Dairy & disease management •Common livestock diseases & their clinical management •Importance of mineral mixture, feed additives and salt in production and reproduction of milch animals •Health control measures in livestock: de-worming & vaccination •Awareness about the urea molasses-mineral block (UMMB) technology 	02 03 02 02 02	March-April April November - April December October	Dr. Ishtiyak A. Mir SMS (Animal Sciences)
		Sheep	<ul style="list-style-type: none"> •Lack of feed & fodder management •Incidence of pre & post partum problems in sheep during winter •Lack of management in sheep production & nutrition during winter •Foot rot in sheep 	<ul style="list-style-type: none"> •Management in sheep production & nutrition problems during winter •Management of foot-rot in sheep & goat 	01 01	November April-May	Dr. Ishtiyak A. Mir SMS (Animal Sciences)
		Poultry	<ul style="list-style-type: none"> •Low body weight •Low egg production •Low feed conversion efficiency •Low Socio-Economic status 	<ul style="list-style-type: none"> • Rural Backyard poultry farming- An aid to poverty elevation • General measures for prevention of poultry disease 	02 01	March August	Dr. Ishtiyak A. Mir SMS (Animal Sciences)
4.	Home Science	Fruit and Vegetable Preservation/value addition and	<ul style="list-style-type: none"> • Lack of knowledge about fruit and vegetable preservation. 	<ul style="list-style-type: none"> • Scientific methods of fruit and vegetable preservation 	02	October	SMS (Home Science) from SKUAST-K

		PHT					
		Nutrition and health for farm women	<ul style="list-style-type: none"> Lack of knowledge on balanced diet 	<ul style="list-style-type: none"> Importance of balanced diet during pregnancy and lactation Importance of nutritious diet for growing children 	02	May	SMS (Home Science) from SKUAST-K
					02	June	
5.	Plant Protection	Paddy,	Incidence of Blast	<ul style="list-style-type: none"> Integrated management of rice diseases 	04	April-June	Dr. M.A. Mantoo SMS (Plant Protection)
		Maize,	Incidence of Cut-worm	<ul style="list-style-type: none"> Integrated management of cut-worm in maize 	02	April- May	
		Chilli	Incidence of Chilli-wilt	<ul style="list-style-type: none"> Integrated disease management of chilli wilt 	03	May-August	
		Pulses	Wilt	<ul style="list-style-type: none"> Integrated disease management of wilt in pulses with special reference to Rajmash & Moong 	02	April-July	
		Apple	<ul style="list-style-type: none"> Root-Rot, Collar-rot,Canker, Scab, Alternaria, Faulty practices of pesticide spray Red-mite and Sanjo-scale 	<ul style="list-style-type: none"> Identification and management of diseases of apple Awareness on spray schedule for management of foliar diseases of apple Diagnosis and management of different insect pests on apple in the changing climatic scenario Orchard sanitation for management of diseases in temperate fruits. 	05	March-November	
					08	March-August	
					02	October	
					02	April-August	

6.	Production of Inputs at Site	<ul style="list-style-type: none"> • Vermin-compost 	High cost of chemical fertilizers	<ul style="list-style-type: none"> • Improved techniques for preparation of Vermi-compost 	06	April-November	<ul style="list-style-type: none"> • Dr. I.J.Khan SMS (Organic Agriculture) • Dr. Ab. Shakoor Khanday SMS (Soil Sciences)
7.	Soil Health and Fertility	All crops	<p>Poor soil fertility due to erosion Indiscriminate use of fertilizers</p> <p>Micronutrient deficiency in field and fruit crops</p>	<ul style="list-style-type: none"> • Soil & water conservation methods in rain-fed areas • Soil & leaf test based fertilizer scheduling (fruit & field crop) • Deficiency symptoms and micronutrient management in fruit and field crops 	04 04 04	<p>May-November July-December August-November</p>	<ul style="list-style-type: none"> • Dr. Ab. Shakoor Khanday SMS (Soil Sciences) • Dr. Ishtiyaq A. Khan SMS (Pomology)
8.	Farm Mechanization	Field and fruit crop	Drudgery	<ul style="list-style-type: none"> • Role of farm mechanisation in crop production • Demonstrations on Maize Sheller, Walnut Peeler, Cracker & Pole Climber 	03 03	<p>May May</p>	All SMS' & Bilal Ahmad Langoo (Prog. Asstt)
9.	Sericulture		<ul style="list-style-type: none"> • Lack of awareness about high yielding races of silkworms for quality cocoon production • Lack of awareness about scientific worm rearing chambers 	Production & management technology of cocoons	02		SMS from SKUAST-K

Training for Rural Youth during 2015-16

S.No.	Thematic area	Crop / Enterprise	Major problem	Training Course Title**	No. of Courses	Month	Names of the team members involved
1.	Crop Production	Maize	<ul style="list-style-type: none"> • Non availability of quality seeds • Low economic returns 	<ul style="list-style-type: none"> • Seed production technology in maize • Production and marketing of maize as a cash crop (Roasted maize) 	02	April-July	<ul style="list-style-type: none"> • Dr. I.J.Khan SMS (Organic Agriculture) • Dr. Ab. Shakoor Khanday SMS (Soil Sciences) • Dr. M.A. Mantoo SMS (Plant Protection)
					02	April	
		Rajmash	<ul style="list-style-type: none"> • Abiotic stress • Low yield 	<ul style="list-style-type: none"> • Management practices of Rajmash as an intercrop in Maize 	02	March-July	<ul style="list-style-type: none"> • Dr. I.J.Khan SMS (Organic Agriculture) • Dr. Ab. Shakoor Khanday SMS (Soil Sciences) • Dr. M.A. Mantoo SMS (Plant Protection)
2.	Horticulture Production	Fruits	<ul style="list-style-type: none"> • Low yield and quality • Low economic returns 	<ul style="list-style-type: none"> • Scientific training and pruning with special reference to apple • Scientific grading and packaging of fruits 	05	November	<ul style="list-style-type: none"> • Dr. Ishtiyag A. Khan SMS (Pomology) • Dr. M.A. Mantoo SMS (Plant Protection) • Dr. Ab. Shakoor Khanday SMS (Soil Sciences)
					04	October	
		Fruits and nuts	<ul style="list-style-type: none"> • Poor quality • Late bearing 	<ul style="list-style-type: none"> • Scientific fruit nursery establishment and management 	05	March-June	<ul style="list-style-type: none"> • Dr. Ishtiyag A. Khan SMS (Pomology) • Dr. M.A. Mantoo SMS (Plant Protection) • Dr. Ab. Shakoor Khanday SMS (Soil Sciences)

		Olericulture	<ul style="list-style-type: none"> Poor seed quality Non availability of quality seed Shortage of vegetable during offseason 	<ul style="list-style-type: none"> Seed production technology of vegetables Offseason vegetable cultivation under protected conditions 	05 03	March-October October-November	<ul style="list-style-type: none"> Dr. Ishtiyaq A. Khan SMS (Pomology) Dr. Ab. Shakoor Khanday SMS (Soil Sciences) Dr. I.J.Khan SMS (Organic Agriculture)
		Floriculture	<ul style="list-style-type: none"> Lack of awareness about commercial cultivation of cut-flowers under protected conditions 	<ul style="list-style-type: none"> Awareness about commercial cultivation of cut-flowers under protected conditions 	02	May	<ul style="list-style-type: none"> Expert form SKUAST-K District Floriculture Officer, Anantnag
3.	Livestock Production	Livestock	<ul style="list-style-type: none"> Unemployment in rural youth 	<ul style="list-style-type: none"> Commercialization of dairy and poultry 	04	June	Dr. Ishtiyak A. Mir SMS (Animal Sciences)
4.	Home Science	Rural Craft	<ul style="list-style-type: none"> Unemployment Lack of knowledge about value addition and post harvest technology 	<ul style="list-style-type: none"> Income generating programmes for rural women Preparation of creative/decorative items Design and development of low cost nutritious diet 	02	January-February	SMS (Home Science) from SKUAST-K
5.	Production of Inputs at Site	<ul style="list-style-type: none"> Vermin-compost Vermiculture 	High cost of chemical fertilizers	<ul style="list-style-type: none"> Improved techniques for preparation of compost, Vermicompost & vermi-wash 	03	<ul style="list-style-type: none"> April - November 	<ul style="list-style-type: none"> Dr. I.J.Khan SMS (Organic Agriculture) Dr. Ab. Shakoor Khanday SMS (Soil Sciences)
6.	Soil Health and Fertility	All crops	Indiscriminate use of fertilizers	<ul style="list-style-type: none"> Techniques of soil and leaf sampling in field & fruit crops 	04	July-October	<ul style="list-style-type: none"> Dr. Ab. Shakoor Khanday SMS (Soil Sciences)

							• Dr. Ishtiyaq A. Khan SMS (Pomology)
7.	PHT and value addition	Horticulture crops	<ul style="list-style-type: none"> • Wastage of C-grade apple • Poor shelf life of vegetables 	Value addition of fruits & vegetables	03	October-November	• Dr. Ishtiyaq A. Khan SMS (Pomology)
8.	Capacity Building Group Dynamics	SHGs	<ul style="list-style-type: none"> • Unemployment • Lack of knowledge on SHGs Management and microenterprise 	Awareness about SHGs SHG management thrift and credit activity Microenterprise for SHGs	02 02 02	September September October	Dr. S.H.Bhat SMS (Agri. Extension)
9.	Fisheries Production Technologies	Fish	<ul style="list-style-type: none"> • Unemployment 	• Commercial fish farming	03	October	Expert from SKUAST-K
10.	Mushroom Cultivation	Dingree Mushroom	Unemployment	Cultivation of dingree mushroom	02	June	Expert from SKUAST-K
11.	Apiculture	Honey production	Unemployment	Commercial honey production	03	April-June	Dr. M.A. Mantoo SMS (Plant Protection)

Trainings for Extension Personnel during 2015-16

Thematic area	Training Course Title**	No. of Courses	Names of the team members involved
Crop Production	<ul style="list-style-type: none"> • Strategies to produce farmers own seed in Paddy & Maize • Protected nursery management in rice 	01 01	Dr. I.J.Khan SMS (Organic Agriculture)
Soil Health	<ul style="list-style-type: none"> • Problems of soil health & concept of INM • Enhancement of soil fertility for improving host plant resistance to diseases & pests • Soil health and water management • Collection & preparation of soil samples of fruit & field crops 	01 01 01 01	Dr. Ab. Shakoor Khanday SMS (Soil Sciences)
Capacity Building and Group Dynamics	<ul style="list-style-type: none"> • Participatory Rural Appraisal • Effective Communication Skills • Methods of effective survey for collection of field data 	01 01 01	Dr. S.H.Bhat SMS (Agri. Extension)
Horticulture	<ul style="list-style-type: none"> • Recent developments of organic horticulture & future prospectus • Importance of honey bees in horticulture • Impact of climate change on fruit crops & future strategies • Rejuvenation of old orchards • Propagation of walnut under controlled conditions • Production of off-season vegetables • Bulb production of tulip & lillium • Scientific training & pruning of apple 	01 01 01 01 01 01 01 01	<ul style="list-style-type: none"> • Dr. Ishtiyaq A. Khan SMS (Pomology) • Dr. I.J.Khan SMS (Organic Agriculture) • Dr. M.A. Mantoo SMS (Plant Protection)
Livestock Production & Management	<ul style="list-style-type: none"> • Vaccination schedule of sheep • Problems related to sheep nutrition during winter • Management of common reproductive problems in dairy cattle • General measures for prevention of poultry disease • Dairy & disease Management 	01 01 01 01 01	Dr. Ishtiyak A. Mir SMS (Animal Sciences)

Plant Protection	<ul style="list-style-type: none"> • Important pests of temperate fruit crops and concept of IPM • Important diseases of temperate fruit crops & concept of IDM • Rodents & their management in agro-eco systems of temperate region of Jammu Kashmir • Insect pest of rice & their management under temperate agro-eco system of Kashmir 	01 01 01 01	Dr. M.A. Mantoo SMS (Plant Protection)
Production of Inputs at Site	<ul style="list-style-type: none"> • Improved techniques for preparation for compost, vermi-compost & vermi-wash 	01	•Dr. I.J.Khan SMS (Organic Agriculture)

Vocational trainings during 2015-16

Thematic area and the Crop/Enterprise	Training title*	No. of programmes and Duration (days)	Type of Clientele (SHGs, NYKs, School students, Women, Youth etc.)	Names of the team members involved
Home Science	Tailoring & Embroidery	02 prog. (02 months) each	young girls	Master trainer
Capacity Building and Group Dynamics	Entrepreneurship development in Horticulture & Agriculture	02 prog. (02 days) each	young girls	<ul style="list-style-type: none"> • Dr. S. H. Bhat SMS (Agri. Extension) • Dr. Ishtiyaq A. Khan SMS (Pomology)
Horticulture	Nursery raising & management of fruit plants	02 prog. (10 days) each	youths	Dr. Ishtiyaq A. Khan SMS (Pomology)
Livestock Production & Management	Scientific dairy farming	02 prog. (05days) each	youths	Dr. Ishtiyak A. Mir SMS (Animal Sciences)
PHT and value addition	Value addition of fruits & vegetables	02 prog. (02days) each	young girls	Dr. Ishtiyaq A. Khan SMS (Pomology)
Production of Inputs at Site	Organic Agriculture & Vermi-Compost	01 prog. (05days)	Youth	Dr. I.j.Khan SMS (OrganicAgriculture)

Extension programmes during 2015-16

Sl.No.	Extension programme*	No. of programmes or activities
1.	Advisory Services	500
2.	Diagnostic visits	40
3.	Field Day	10
4.	Group discussions	03
5.	Kisan Ghosthi	02
6.	Film Show	00
7.	Self -help groups	02
8.	Kisan Mela	01
9.	Exhibition	01
10.	Scientists' visit to farmers field	175
11.	Plant and Animal health camps	04
12.	Soil health camp	02
13.	Method Demonstrations	25
14.	Exposure visits	03
15.	Technology week,	01
16.	Farm innovators meet	01
17.	Awareness programs	40