Annual Progress Report 2012-13









Krishi Vigyan Kendra, Bilaspur

Indira Gandhi Krishi Vishwavidyalaya,
Raipur (C.G.)

Content

1. **DISTRICT PROFILE**

1.1 HISTORY & GEOGRAPHICAL LOCATION

Bilaspur city is situated in the eastern part of the newly formed Chhattisgarh state within the Indian union. It is about 400 years old and named after a Fisher- Man Woman "Bilasa". At present the city is extended in 29.85 sq. km. having population around 2,74,048. Bilaspur city is on the bank of river Arpa, situated between 81' 14" to 83' 15" longitude and 21' 47" to 23' 8" latitude. The average rain fall is 1085.50 mm. and the maximum temperature goes up to 45.4_0 C. North-West boundary is shared by the Madhya Pradesh while district Koria marks its North-East boundary. The district Kabirdham is in the West while Durg and Raipur district makes its South boundary. The East boundary is marked by the district Janjgir-champa and Korba.

The total area of the district is 8,56,885 hectares, out of which 46.85% ha. is forest land. The area under cultivation in the district is 43% of the total area i.e. 3,67,470 hectares. Parts of Kota, Lormi, Mungeli, Masturi, Bilha and Takhatpur blocks have got rich cultivable land. Apart from this, North-west part of Bilaspur is a great source of valuable forest products such as - Teak, Sal, Sarai, Bamboo, Harra, Mahua, Chirounji etc and other minor forest products. The irrigated % of the district for Kharif crops is 46% of the total agricultural land, whereas only 27% of the agricultural land is utilized for Rabi crops.

Bilaspur is a SC/ST (42%) dominated district of the State. The district is having two major Agro-ecological situations *viz.* irrigated and rainfed. In Kharif, 50% area is irrigated with the cropping intensity of 147%. The district comprises of varying soil groups *viz.* Bhata (*Entisols*, 10%), Matasi (*Inceptisols*, 25%), Dorsa (*Alfisols*, 35%), Kanhar (*Vertisols*, 30). The fertilizer consumption in the district is 79 N, 36 P and 11 K Kg/ha (Total 126 Kg/ha). Paddy is the main kharif crop covering an area of 342 thousand ha, while in rabi, coverage under *Utera* crops is highest (89,900 ha), followed by Chickpea (39,950 ha) and wheat (29,950 ha). In addition, summer rice is also popular in the district covering 14,100 ha. Sericulture and aqua culture (12,800 ha) is still an alternative source of employment.

1.2 Climate:

Bilaspur falls within the temperate zone of Indian sub continent. The winter Commences from December and last till the end of February. The summer continues till the second week of June. Monsoon commences from middle of June and remains till the end of September. Excessive heat during summer necessitates general public sleeping in open. The maximum temperature in May 46^0C and mean minimum temperature is 9^0c to 7^0c in December. May is the hottest month & December is the coldest. The relative humidity is higher during the South West monsoon season, being generally over 75%. After Monsoon Season, humidity decreases and during the winter season, air is fairly dry. Rainfall observations indicate that annual rainfall in the area is around 1400 mm. Rains are

predominant during July -August. South-West is the predominant wind direction during the period from May to September. Wind is generally calm and the city has around 90 calm days. The layer of soil is moderate and the underground water is sufficient.

1.3 Source of Irrigation & Crops

The means of irrigation available in the district are Wells, Ponds, Debris, Tube-Wells, Rivers, Nalas, and Canals etc. Paddy, Red Gram, Green Gram, Groundnut and Sesamum are the main crops in Kharif while Wheat, Maize, Gram, Lentils, Blackgram etc. are grown in Rabi season.

1.4 POPULATION OF DISTRICT

Total	19, 93,042,
Male	10, 09,007
Female	9, 84,035
Sex Ratio	975
Rural	15, 94,434(80%)
Urban	3, 98,608(20%)
SC	3, 78,677(19%)
ST	4, 18,538(21%)

1.5 LITERACY OF DISTRICT

Total	63.68%
Male	78.98%
Female	48.08%

1.6 OTHER INDICATORS

Population Growth Rate	17.59% (In ten years)
Density	241
Birth Rate (Per Thousand)	28
Death Rate(Per Thousand) -	11.1
Infant Mortality Rate	72

1.7 Major Problems

Weed infestation in different crops
Blast & Stem borer causing major yield loss in paddy crop.
Collar rot/wilt complex and pod borer in Gram is causing heavy losses
Leaf blight & fruit borer in Tomato & Potato is serious pest causing losses
Low yield of paddy from existing variety
Lack of use of bio-fertilizers, bio agents and manures in crop
Less mechanization
Sowing by traditional method
Malnutrition among farm family.
Lack of knowledge about preservation of fruits/vegetables.

2 General information about KVK Bilaspur

Krishi Vigyan Kendra, Bilaspur was established in the year 1984 under administrative control of Indira Gandhi Krishi Vishwavidyalaya. The KVK is granted by Indian council Agricultural research (ICAR).

2.1 Mandates & major activities of the KVK

KVK Bilaspur has been performing all mandatory mainly technology assessment, refinement, farmers training and demonstration of technology.

1. On farm testing to identify the location specificity of technologies in various farming systems.
2. Frontline demonstrations to establish production potentials of newly released technologies on farmers' fields and provide feedback.
3. Training of farmers and farmwomen to update their knowledge and skills in modern agricultural technologies and training of extension personnel to orient them in the frontier areas of technology development.
4. Work as resources and knowledge centre of agricultural technology for supporting initiatives of public, private and voluntary sector for improving the agricultural economy of the district.
5. Create awareness about frontier technologies through large number of extension activities like Farmer fair, Field day, Strategic campaign, Ex-trainees meet, etc.
6. The seed and planting materials produce by the KVKs also be made available to the farmers.

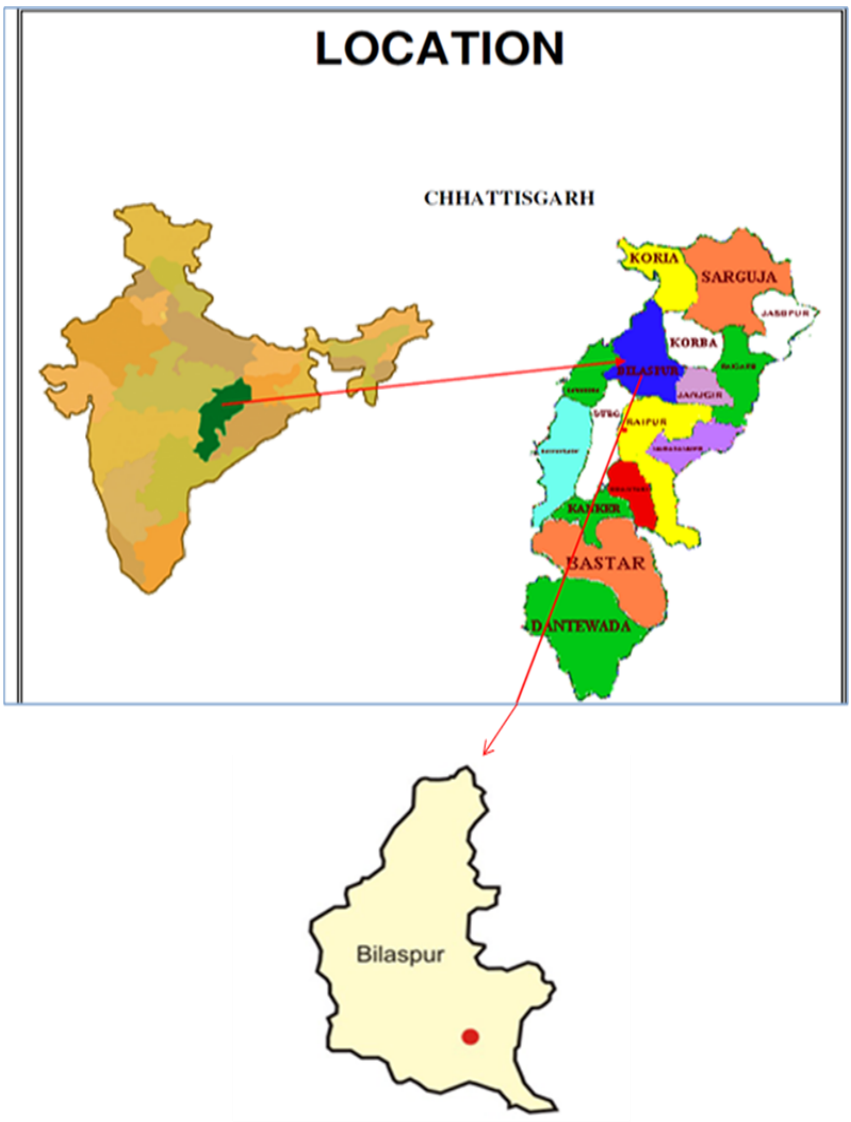
2.2 Infrastructures

S.N.	Particular	No.	Remarks
1.	Office building	01	Required Maintenance
2.	Threshing Floor	01	
3.	Dairy Unit	01	
4.	Tube well	01	
5.	Fencing		Conducted
6.	Farm Pond	02	

2.3 Land area

In 1994 – 95 the total farm area of 11.50 ha was transferred from RARS, Sarkanda Farm to the KVK to establish demonstration unit. Since then, the KVK farm is producing seed of different crops to ensure the availability of good quality seed to the farmers. Currently, the area under cultivation in the KVK instructional farm is 6.82 ha. The KVK also has a dairy unit for demonstration purpose.

1.	Total area	:	11.50 ha
2.	Area under road and bunds	:	0.80 ha
3.	Colony & Office buildings	:	1.70 ha
4.	Area under fish pond	:	0.60 ha
5.	Area under forestry plantation	:	0.90 ha
6.	Area under orchard	:	0.68 ha
7.	Area under crop cultivation	:	6.82 ha
8.	Irrigated area	:	6.82 ha



2.4 Operational area of KVK:-

BLOCKS PROFILE OF BILASPUR DISTRICT (2012-13)

Name of block	Total geographical Area(ha)	No. of village
Belha	79,879	201
Masturi	73,920	171
Kota	1,16,598	164
Mungeli	61,332	282
Takhatpur	71,940	191
Patheriya	51,464	169
Lormi	1,62,240	228
Gourella-I	78,712	62
Gourella-II	51,055	83
Marwahi	1,09747	72

2.5. Staff Position:

Sanctioned post	Name of the incumbent	Discipline	Highest degree	Date of joining	Category (SC/ST/ OBC/ Others)
Programme Coordinator	Dr. R.N.Sharma	Agriculture Extension	Ph.D	11.01.12	Others
S.M.S./Pl. Scientist	Dr. D.K.Sharma	Agriculture Extension	Ph.D	30.06.95	Others
Subject Matter Specialist	Dr. Kiran Gupta	Home Science	Ph.D	29.09.12	Others
Subject Matter Specialist	Er. Umesh Dhruv	FMP	M.Tech. (Agri.)	03.11.07	ST
Subject Matter Specialist	Smt. Shilpa Kaushik	Agronomy	M.Sc (Agri.)	06.09.12	Others
Subject Matter Specialist	Sh. Devendra Upadhyay	Horticulture	M.Sc (Agri.)	07.09.12	Others
Subject Matter Specialist	Shri Vinod K. Nirmalkar	Plant Pathology	MSc. (Ag.)	13.09.12	OBC
Programme Assistant	Smt Nivedita Pathak	Home Sci.	M.Sc (Home Sci.)	15.01.07	Others
Farm Manager	**Vacant**				
Programme Assistant	Sh. D.P.S.Chouhan	Fisheries	**(Abscond) From 2005**	22.11.93	Others
Programme Assistant (Comp.)	Smt. Sushila Ohdar	Computer	MCA	20.09.12	ST
Accountant / superintendent	Sh. J.P.Sharma			23.07.10	Others
Driver	Sh. M.L.Vaishnav			01.01.86	OBC
Driver	Sh. Panchu Ram Yadav			17.08.09	OBC
Supporting staff	Sh. Indra Ram Patel			01.01.86	OBC
Supporting staff	Smt. Sahodar bai			16.09.08	OBC

2.6 Mushroom Unit & Nursery Unit

We are cultivated mushroom at our KVK sites, we are getting income from its. We cultivated four different types of oyster mushrooms i.e. *Pl. florida, Pl. oeus, Pl. hypsigygus, Pl. sajar kaju* for demonstration & training of farmers and farm women. Produces 500 seedlings of tomato & distributed to farmers.

Name of the Product	**Qty(Kg)**	**Amount (Rs.)**		**Remarks**
		Cost of inputs	**Gross income**	
Mushroom production	12.25	432	980	Mushroom Income from January 2013

Major group/class	Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
					Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
										Distributed to 13 farmers
Seedlings	Tomato	September	October	0.05	Indu	Planting Material	500	-	-	

Cultivation of different type of Oyster Mushroom at KVK



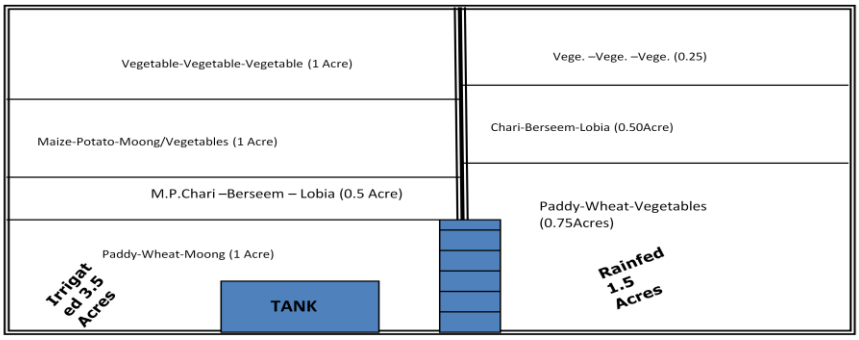
मशरूम की विभिन्न प्रजातियों का अवलोकन करते हुए डॉ. जे.एस.उरकुरकर, निदेशक विस्तार सेवाएं एवं अन्य




Pleurotus Florida *Pleurotus eous* *Pleurotus Hypsizygus* *Pl. Sajar Caju*

2.7 IFS UNIT:

Krishi Vigyan Kendra, Bilaspur



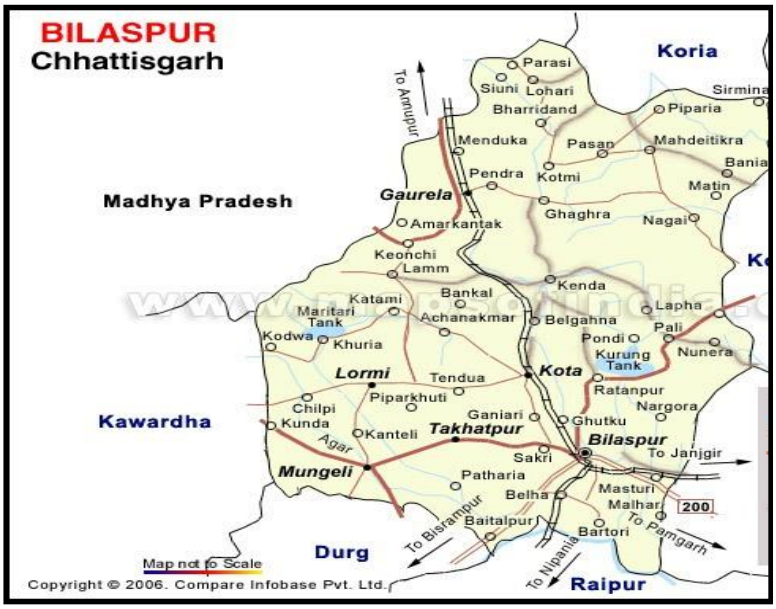
Irrigated 3.5 Acres: High tech Vegetable(Drip) + Rice – Wheat/ mustard /Gram – Vegetable/ moong + Maize – Potato – moong / Vegetable + Fodder (Chari/ maize/ Berseem) + On bunds (marigold/ arhar/ Guava/ Papaya/ Lemon / drumstick/ vetiver/ lemon grass)+ Cows(2) + Goats (15) + Poultry(30) + Pond+ Fish +Duck (30).

Rainfed 1.5 Acres: Rice – gram-cucurbit + Vegetable – Vegetable (gravity drip) + Fodder + Dug well + Cows (2) + Goats (15) + Poultry Birds (30) Cows (2) + Goats (15) + Poultry Birds (30) + On bunds (marigold/ arhar/ Guava/ Papaya/ Lemon / drumstick/ vetiver/ lemon grass).

2.8 Outreach of KVK

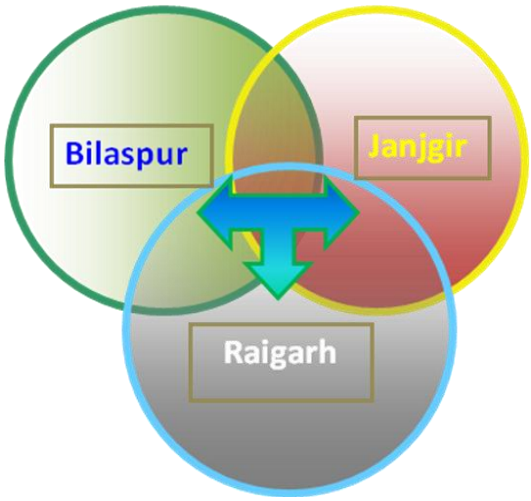
KVK is performing its mangatory activities in all 10 Blocks of the District Bilaspur and Mungeli. Districts having 1623 villages we reach 923 villages by our mandatory programmes. This year we reach 823 villages by our sponsored programme Krishak Sangwari.

Year	Total Blocks	Villages		Percentage of outreach out of total villages
		Total villages	No. of villages covered	
Since inception to 2013	10	1623	923	56.87
Through krishak sangwari	10	1623	816	50.27



2.9 KVK RING

Resources available for sharing with ring partners for Lac Culture, Fish Farming, Veterinary etc.



3.0 THRUST AREAS OF DISTRICT

Weed management at critical period
Crop diversification in upland rice
Combined use of inorganic and organic fertilizer
IPWM in different crop
Safe grain storage
Integrated Insect & disease management
Planning of balanced diet to cure malnutrition
Mushroom cultivation and Spawn Production
Vegetable and Fruit Production or cultivation
Preservation and value addition of fruit and vegetable
Farm Mechanization
Mass Production of Bio agents for Insect and disease management
Seed and soil treatment for seed and soil borne problems.

4.0 Potential & Possibilities for development in district.

1.	Mushroom & Spawn production	Among all 8 blocks of district, Gaurella, Pendra, Marwahi and Kota is having a very good climate, dense forest and coolest area of districts.
2.	Eco-friendly management of pest and disease	Bilaspur district is having rich source of medicinal and herbal plants, already using by few farmers and Baigas, Neem plant is available in huge quantity.
3.	Flower and vegetables farming	Local established market available & local consumption
4	Processing of fruit & vegetable	Large no. of Women SHG's are working & local vegetable market established in the district.

5.0 Summary of Major Activities

Activities	Target	Achievement	Excess/ Deficit
OFT	10	14	+4
No of FLD	20.0 hac	43.20 hac	-
No of Beneficiaries in FLDs	82	117	+35
Total No. of other Extension Activities	-	**653**	
News Letter (Kisan Mitan)	04	04	0
Kisan mela	04	02	-2

Performed various activities i.e. conduction of OFT, FLD, imparted On & Off campus trainings for farmers and farm women & rural youths, collaborative and sponsored training programmes, seed production at farmers field, Kisan Melas & Gosthi, extension of technologies through newsletters, publication etc. During the year 2012-13 KVK conducted 14 on farm trials against of targeted 10 OFTs of different disciplines covering 3 blocks and 9 villages with 57 beneficiaries.

5.1 Front Line Demonstration :

KVK Conducted FLDs in 43.20 ha of Oilseed, Pulses and other Crops with a target of 20 ha with benefited 117 farmers of beneficiaries of SC, ST and other categories.

SRI

In Kharif we conducted SRI demonstrated at Village Bachhalikhurd block Kota with Rice variety Indira Maheshwari (IGKV). This variety was introduced first time in village. Average yield of demonstration under this FLD was 52 q/ha and this is superior over the local variety and method of plough.

FLD on SRI Paddy Var – Indira Maheshwari

FLD Arhar and Til

In Kharif season KVK conducted FLD on Arhar and Til. Under this FLD the variety was Rajeevlochan and TKG-306, the average yield was 9.5 g/ha and 5.6 q/ha which is superior over 8.2 q/ha and 4.2 q/ha.



FLD on Arhar Var- Rajeev Lochan Under –ICAR and ACRIP

Rabi FLD

Under Rabi FLD KVK conducted 4 FLDs on Gram (Var JAKI-9218), Mustard (Var-Chhattisgarh Sarson), Wheat Seed Production (Var-GW-273), Gram Wilt (*Trichoderma* & *Rhizobium* Cultures for seed treatment).

FLD on Gram Var- Jaki 9218

FLD on Mustard Var- Chhattisgarh Sarsoon

FLD on Gram Wilt/Wilt complex management

There were 14 farmers ST category from village Navgavon, Block Bilha, District Bilaspur selected for this FLD. *Trichoderma & Rhizobium* were given to the farmers as critical input. During the demonstration the incidence of disease is recorded and found that 9.24% and 21.32% /m^2 in demonstration and check plot respectively. In the demonstration plot the average yield was 7.4 q/ha while in check plot it was 6.35 q/ha. The % change in yield was 16.53% with B:C ratio 2.35 and 2.11 of demonstration and check plot respectively.

FLD on Gram wilt management by seed treatment with *Trichoderma and Rhizobium*

5.2 On Farm Testing (OFT) conducted during 2012-13:

Agriculture and allied sectors is suffering from lots of problems related to technology, inputs used, soil condition, insect & pests management such problems is indentified by survey, interaction with farmers & other methods, on the basis of such problems released technologies is tested under farmer field condition "on farm testing" to identify best possible technology suitable for area.

OFT : 1

OFT is conducted at village Navgaon block Bilha of four farmers.

Title	**Assessment of *Trichoderma* and *Rhizobium* culture as seed treatment and soil application against wilt/wilt complex of Gram**
Season & Year	Rabi- 2012
Problem	Gram wilt causing heavy yield loss
Thematic Area	Disease Management/Plant Protection
Name of Technology	*Trichoderma* and *Rhizobium* culture as seed treatment and soil application
Source of Technology	IGAU 2007, AMU,Aligarh & Sher-e-kashmir AU-2011
Farmers Practice (T_1)	No use of culture
Assessed Rec. Practice (T_2)	*Trichoderma* and *Rhizobium* culture as seed treatment and soil application by multiplying in FYM
Other information	Seed rate 40 kg/acre, Sowing – 1st week of Dec Harvest- End of March & April , culture rate-10gm/kg of seed, 1.5 kg *Trichoderma* is multify in 100 kg of FYM and then apply in soil during 2nd time ploughing before sowing
No. of Trials (Replication)	04

Treatment	Yield (q ha^{-1})	% Increase in Yield	% Mortality /sq. m.	% Reduction in mortality	Net Income Rs/ha	B:C Ratio**
No Use of Culture	6.35	37.79	21.25	66.96	9380	1:2.1
Application of *Trichoderma* and *Rhizobium*	8.75		7.02		15700	1:2.8

Result: Seed and Soil treatment by *Trichoderma* and *Rhizobium* for Gram wilt complex the average yield was 8.75 q./ha which is superior over control 6.35 q/ha. it means by the use of culture the percentage change in yield was 37.79% with disease mortality percent was 7.02% and 21.25% respectively.

Recommendations: Seed treatment with *Trichoderma + Rhizobium 10 gm/kg of seed and 1.5 kg Trichoderma is multify in 100 kg of FYM and then apply in soil during 2nd time ploughing before sowing.*

Farmers Feedback : Farmer's get less wilt incidence as compare to previous year in their fields, crops is show more health then control.

Mass multiplication of *Trichoderma* in FYM

Seed Treatment with *Trichoderma* and *Rhizobium* under OFT of wilt management in Gram

OFT : 2

Title	Assessment of Ca in the form of gypsum to enhance the quality of Potato
Season & Year	Rabi 2012-13
Problem	Availability of low quality of Potato
Thematic Area	Horticulture
Name of Technology	Ca in the form of gypsum to enhance the quality of Potato
Source of Technology	IGKV Raipur 2012
Farmers Practice (T_1)	Not using Gypsum as supplement for improving Potato quality.
Assessed Rec. Practice (T_2)	Ca in the form of gypsum to enhance the quality of Potato
No. of Trials (Replication)	04

Treatment	**Yield (q ha^{-1})**	**% change in Yield**	**Parameter Rs/Kg**	**% change in Parameter**	**Net Income Rs/ha**	**B:C Ratio****
T_1	195	2.56	4.00	37.5	43500	1:2.26
T_2	200		5.5		75100	1:3.15

Result: Use of Ca in the form of Gypsum in Potato @ 80 kg $CaSo_4$ /ha the average yield was 200q/ha which is superior over 195 q/ha with percent change in yield of 2.56%.

Recommendations: Apply 80kg/ha Ca in the form of gypsum to enhance the quality of Potato.

Farmers Feedback: Farmer's appreciated the use of gypsum to enhance the quality of Potato.

Seed treatment

Distribution of $CaSO_4$

Application of $CaSO_4$

Sowing of potato

OFT : 3

Title	Assessment of Post emergence herbicide in wheat
Season & Year	Rabi 2013
Problem	Weed infestation in wheat
Thematic Area	Weed management
Name of Technology	Fenoxaprop-p-ethyl 17.7%Metribuzin 13.6% Post emergence weedicide (Accord+)
Source of Technology	Bayer 2010
Farmers Practice (T_1)	No use of weedicide
Assessed Rec. Practice (T_2)	Use of post emergence weedicide 30-35DAS followed by one hand weeding
No. of Trials (Replication)	05

Treatment	Yield (q/ha)	% change in Yield	Weed count (per m sq)	% change in Parameter	Net Income Rs/ha	B:C Ratio**
T_{1} (Control)	18	19.44	110	56.36	6630	1:1.4
T_{2} (Recom)	21.5		48		9628	1:1.5

Result : Use of post emergence herbicide Accord Plus (Fenoxaprop P ethyl 17.77% + Metribuzin 13.6%) 40-50 ml/Sprayer 25-30 DAS in wheat the average yield was 21.5 q/ha which is superior over 18 q/ha with percent change in yield of 19.44%.

Recommendations: Use of Post emergence weedicide one hand weeding.

Farmers Feedback: Farmers accepted the technology as the use of weedicide reduces less labour for weeding and gave good return.

Assessment of Weedicides

OFT : 4

Title	Assessment of chemical for Mustard Aphid management
Season & Year	Rabi 2012-13
Problem	Yield loss due to Aphid
Thematic Area	Insect Management/Plant Protection
Name of Technology	Imidaclorpid 17.85 % SL
Source of Technology	Assam Agriculture University Jorhat 2010
Farmers Practice (T_1)	No use of chemicals
Assessed Rec. Practice (T_2)	Imidaclorpid 17.85% SL 3 ml/sprayer (15 lt of water)
Other information	Sowing 1st week of December Data recordred after 1 days of spray . 20gm a.i./hac
No. of Trials (Replication)	04

Treatment	Yield (q ha^{-1})	% increase in Yield	Parameter/ Aphid population density/cm2 Inflorescence	% change in Parameter	Net Income Rs/ha	B:C Ratio**
T_1	5.26	54.95	17.26	67.55	5650	1:1.75
T_2	8.15		5.60		11475	1:2.3

Result : Mustard Aphid management by chemical the average yield was 8.15 q/ha which is the best over 5.26 q/ha it means the use of *Imidachlorpid* 17.85% SL increases the yield 54.95% with Aphid population 5.60/cm^2 and 17.26/ cm^2 respectively.

Recommendations: Spray *Imidaclorpid* 17.8 SL 3 ml/ 15 lt of water during incidence of aphid.

Farmers Feedback: Farmer's appreciated the chemical no aphid population found after 48 hrs of spray.

Assessment of Chemical against Mustard aphid

OFT : 5

Title: Assessment of protein rich nutritious food item against malnutrition in pre school going children of 3-5 years old.

Result: Women Empowerment with a emerging problem of malnutrition in 3-5 years old children's. The input given to the beneficiaries is protein rich food stuff which increases the body weight with 1-2 kg in children respectively. The food stuff was given for 1 month only.

Recommendation: 3-5 old children must have consume 50gm/day/children protein rich food

Feedback: Parents get aware & adopt the recommendation

Weight of children after having nutritious food at village Lalpur (Kota)

OFT's :

Year/ season	Problem diagnose	Thematic Area	Farming Situations	Title of OFT	Recommendations
2012 Kharif	Lack of Green manuring in paddy	Nutrient Management	Upland paddy	Assessment of green manuring in paddy	Green manuring recommended
2012 Kharif	High weed infestation in paddy	Weed management	Transplanted paddy	Assessment of Post emergence weedicide in paddy	Post emergence weedicide as recommendade
2012 Kharif	Less efficiency of desi Plough	Farm Machinery	Mid land	Assessment of Trifal Biasi Plough in Paddy crop	Trifal Biasi is better weed control plough in paddy
2012Kharif	More drudgery and time consuming in weed management	Farm Machinery	Mid land	Assessment of Ambika Paddy weeder in SRI method	Ambika paddy weeder is better weed control in paddy
2012-13 Rabi	Lack of improved variety	Varietal assessment	Rabi	Assessment of Lathyrus Var. Mahativra	Accepted the recommendation
2012-13 Rabi	Broadcasting method of sowing	Farm Machinery	Mid land	Assessment of tractor drawn seed cum fertilizer drill in wheat crop	
2012-13 Rabi	Gram wilt causing heavy yield loss	Disease Management/Plant Protection	Irrigated	Assessment of Trichoderma and Rhizobium culture as seed treatment and soil application against wilt of Gram.	Seed treatment with Trichoderma + Rhizobium 10 gm/kg of seed and 1.5 kg Trichoderma is multify in 100 kg of FYM and then apply in soil during 2nd time ploughing before sowing
2012-13 Rabi	Yield loss due to leaf blight	Disease Management/Plant Protection	Irrigated	Assessment of chemicals for management of leaf blight of Tomato	Femoxadone 10% + Mancozeb 50% WG 1 gm/ ltr. of water. Apply as seed, seedling treatment and foliar spary.
2012-13 Rabi	Yield loss due to Aphid	Insect Management/Plant Protection	Irrigated	Assessment of chemicals for Mustard Aphid management	Imidaclorpid 17.85% SL 3 ml/sprayer (15 ltr. of water)
2012-13 Rabi	Unavailability of late sowing varieties under rainfed condition	Low yield due to use of local variety	Irrigated	Assessment of variety CG-1006 of wheat	Recommended seed rate
2012-13 Rabi	Broadcasting method of sowing	Farm Machinery	Irrigated	Assessment of Bullock drawn seed cum fertilizer drill for line sowing	
2012-13 Rabi	Availability of low quality of Potato	Horticulture	Irrigated	Assessment Ca in the form of gypsum to enhance the quality of Potato	
2012-13 Rabi	malnutrition in pre school children	Nutrition	3-5 year	Assessment of protein rich nutricius food item against malnutrition in pre school going children 3-5 years	
2012-13 Rabi	Weed infestation in wheat	Weed management	Irrigated	Assessment of Post emergence herbicide in wheat	

OFT Title	Parameters			Average Cost of cultivation (Rs/ha)			Average Gross Return (Rs/ha)			Average Net Return (Rs/ha)			Benefit-Cost Ratio (Gross Return / Gross Cost)		
	Name and unit of Parameter	Demo	Check	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP(T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP (T_2)	Refined Practice , if any (T_3)
Assessment of green manuring in paddy	No. of effective tillers/sq.m	398	298	15000	17000		36625	45000		21625	28000		1:2.4	1:2.6	
Assessment of Post emergence weedicide in paddy	No. of Weed count/sq.m	50	115	15000	17500		37500	47500		22500	30000		1:2.5	1:2.7	
Assessment of Trifal Biasi Plough in Paddy crop	Working Capacity	0.4ha/ day	0.2 ha/day	18,000	21000		44391	52386		32391	39286		1:2.46	1:2.49	
Assessment of Ambika Paddy weeder in SRI method	No. of tillers per hill	49	37	18000	21000		45006	55227		27006	34227		1:2.50	1:2.62	
Assessment of malnutrition in pre school going children 3-5 years	Measurement of weight in Kg.	12.65	11.20		2600										
Assessment of Lathyrus Var. Mahativra	Improved variety Yield /ha.	3.7	2.4	2500	3000		5040	7770		2540	4770		1:2	1:2.60	
Assessment of tractor drawn seed cum fertilizer drill in wheat crop	No. of tiller per plant	5	3	10500	12500		23863	31363		13363	18862		1:2.27	1:2.50	
Assessment of *Trichoderma* and *Rhizobium* culture as seed treatment and soil application against wilt of Gram.	Disease Incidence /sq. m.	7.02	21.25	8400	8800		17,780	24,500		9380	15,700		1:2.1	1:2.78	
Assessment of chemicals for management of leaf blight of Tomato	Disease severity /sq. m.	23.24	59.25	32500	37500		49500	64500		17000	27000		1:1.52	1:1.72	
Assessment of chemicals for Mustard Aphid management	Aphid population density/cm2	5.60	17.26	7500	8900		13150	20375		5650	11475		1:1.75	1:2.28	
Assessment of variety CG-1006 of wheat	Varietal Assessment 1000 grain weight	31.10	30.0	8000	11500		18500	23125		8500	11625		1:1.90	1:2.01	
Assessment of Bullock drawn seed cum fertilizer drill for line sowing	Field capacity	0.4ha/ day	0.2 ha/day	8400	9500		21700	26656		13300	17156		1:2.58	1:2.80	
Assessment Ca in the form of gypsum to enhance the quality of Potato	Rs/- per Kg	5.5	4	34500	34900		78000	110000		43500	75100		1:2.26	1:3.15	
Assessment of protein rich nutritious food item against malnutrition in pre school going children 3-5 years	Measurement of weight in Kg	12.65	11.20												
Assessment of Post emergence herbicide in wheat	No. of Weed count/sq.m	48	110	16500	18000		23130	27627.5		6630	9627.5		1:1.5	1:1.4	

FLD conducted in the year

Thematic area	Name of Crop/ Enterprise	Season and year	Technology demonstrated	Crop- Area (ha) / Entrep - No.	Name of Variety/Technology/ Entreprizes	Results (q/ha)		% change	No. of farmers				
						Demons	Check		SC	ST	OBC	Others	Total
Varietal assessment	Arhar	2012 Kharif	Improved varieties	7	Rajeev Lochan	9.50	8.20	15.85	01	23	05	01	30
Varietal assessment	Sesame	2012 Kharif	Improved varieties	5.0	TKG-306	5.60	4.20	33.0	-	14	-	-	14
SRI	Paddy	2012 Kharif	SRI	12.40	Indira Maheshwari	52	38	36.84	-	17	05	-	22
Varietal assessment	Gram	2012-13 Rabi	Improved varieties & use of culture	5.0	Jaki-9218	9.35	7.40	26.35	25	-	-	-	25
Varietal assessment	Mustard	2012-13 Rabi	Improved varieties & use of culture	5.0	Chhattisgarh Sarson	8.9	5.30	67.90	-	-	13	-	13
Seed Production	Seed production on Wheat	2012-13 Rabi	Improved varieties	20.0	GW-273	25.40	19.49	30.32	-	-	-	20	20
Disease Management	Gram Wilt	2012-13 Rabi	Use of culture	8.60	*Trichoderma* and *Rhizobium* cultures for seed treatment	7.40	6.35	16.53	-	14	-	-	14

Economics of FLD :

Name of Crop/ Enterprise	Technology demonstrated	Parameters			Cost of cultivation (Rs/ha)		Gross Return (Rs/ha)		Average Net Return (Rs/ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)	
		Name and unit of Parameter	Demo	Check	Demo	Check	Demo	Check	Demo	Check	Demo	Local Check
Arhar	Improved varieties and use of culture	No. of pods per plant	170	139.5	11000	10000	36575	31570	25575	21570	1:3.3	1:3.1
Sesame	Improved varieties	No. of pods per plant	94.6	78.8	8500	7000	23520	17640	15020	10640	1:2.76	1:2.5
Paddy	SRI	No. of panicles per meter sq. area	582	365	21000	18000	65000	47500	44000	29500	1:3	1:2.6
Gram	Improved varieties, line sowing & seed treatment	No. of pods per plant	80.3	63.2	9500	8400	26180	20720	16680	12320	1:2.7	1:2.5
Mustard	Improved varieties & use of culture	No. of branches per plant	7.3	5.9	8500	7500	22250	13250	13750	5750	1:2.61	1:1.8
Seed production on Wheat	Improved varieties	1000 grain weight	31.92	31	20000	17000	48260	37031	28260	20031	1:2.4	1:1.7
Gram	Application of *Trichoderma* and *Rhizobium* culture as seed treatment	Disease incidence /sq.meter	9.24	21.32	8800	8400	20,720	17780	11920	9380	1:2.35	1:2.11

Name of Crop & Variety	Feedback of Farmers about FLD Oildseed, Pulses and other crops
Arhar-Rajivlochan	Farmer's reaction was positive towards improved variety demonstrated
Til-TKG-306	As the improved variety TKG 306 gave good yield in farmer's field, farmer's reaction was positive.
Paddy-Indira Maheshwari	Indira Maheshwari showed less pest infestation especially stem borer.
Gram-JAKI-9218	Application of *Trichoderma* and *Rhizobium* as seed treatment and soil application of *Trichoderma* showed better results (improved crop growth,nodulation, branches and yield) & disease incidence is low as compared to last years crop.
Mustard-Chhattisgarh Sarson	Farmers satisfied with improved variety Chhattisgarh Sarson and profitable returns
Wheat –GW-273	Improved Variety performed well under farmers field situation

6.0 Details of SAC Meeting

Date of SAC meeting	No. of SAC members attended	Major recommendations
27-05-12	20	1. Dr. C.R. Gupta Dean TCBCARS, Bilaspur had suggested that increase area under organic farming and use of cow dung and urine and also suggested for imparting training programmes on fruit-vegetables-preservations, Mushroom production and Tailoring 2. Dr. R.K. Bisen Professor Horticulture TCBCARS, Bilaspur suggested for establishment of Vegetables Crop Cafeteria. 3. Dr. A.L. Rathore Professor DES, I.G.K.V., Raipur had Suggested that a) Incorporation of Green Manure as organic fertilizer in FLD Programme instead of Post emergence weedicide. b) Replacement of summer Rice into Maize under FLD. c) Impart trainings on Low cost spawn production unit and technology for SHG's

7.0 Training Programme :

Krishi vigyan Kendra, Bilaspur had conducted various training programme during 2012-13 in mandatory field *viz.* training of farmers and farm women, rural youth, in-service and ATMA Linkage programme. 60 training programmes were conducted in various discipline among 1069 farmers and farm women according to the year planner and need based of the farmers. Two days training programme with 09 participants were conducted under rural youth on "Mushroom Production technology". Under ATMA linkage 53 training programme were successfully completed among 1956 *krishak Sangwari* (as trainee) during *Kharif and Rabi* 2012-13. Apart from this KVK's Scientist were also engaged in various training programmes during *Kharif And Rabi* sponsored by state agriculture department and other agriculture extension functionaries. There were 57 trainings imparted among 1340 trainees. KVK Bilaspur had conducted total 171 trainings in all training mandates among 4374 trainees including 4018 male and 447 female.

Trainings	Agronomy	Plant Protection	Horticulture	Home Science	Agril. Engineering	Agril. Extension	Total	Total Number of participant
Mandate Training	16	15	05	08	09	07	60	1069
Rural Youth	01						01	09
Krishak Sangawari	53						53	1956
Sponsored/ Collaborative	57						57	1340
G. Total							**171**	**4374**

Particulars	No. of Course	Total Duration (Days)	Participation						Total
			Male			Female			
			SC	ST	Other	SC	ST	Other	
Farmers and Farm Women	60	111	95	208	518	08	105	135	1069
Rural Youths	01	02	-	07	02				09
Sponsored/Collaborative	57	57	156	218	1013	12	37	85	1340
Krishak Sangawai	53	53	518	481	892	17	18	30	1956
Grand Total	171	223	769	914	2425	37	160	250	4374

Trainings





8.0 Extension activities (Farm advisory services)

Under farm advisory services KVK usually performed all extension activities like Kisan Mela, Farmers day, Radio Talk, Publication of News letters, bulletin and extension literature for farmers benefit. In Kharif & Rabi season KVK conducted 4 field days and 2 Kisan Melas the total no. of participants were 1332 of different farm groups including the farm women and children KVK conducted 11 Kisan goshthi, 2 Ex-trainees meet 8 diagnostic visit to farmers field, 4 exhibitions with 1255 participants. In both seasons 838 farmers visited KVK and solved their problems. For transfer of technology in mass KVK conducted 35 film shows, 20 Radio programs, 9 TV programs and 4 news letters which is continuously improving the knowledge of farmers. Apart from these activities KVK involved in Gram Suraj Abhiyan ogranized by agriculture department and awared 2057 farmers. Recently KVK Bilaspur started the soil testing laboratory and tested 15 samples.

Extension Activities	No	Participants/ beneficiary
Field Days	04	471
Kisan Mela	02	851
Kisan Gosthi/ Farmers Meeting	11	390
Ex- trainees Meet	02	22

Diagnostic Visit to farmers Fields	08	96
Farmers Visit to KVK	-	838
Exhibitions	04	747
Film Shows	35	Mass
Radio Programmes	20	Mass
TV talks	09	Mass
News Letter	04	2000
Soil Sample Tested	15	15
Others (Gram Suraj Abhiyan)	05	2057

8.1 Skill development and Vocational training programmes for Rural Youth conducted by the KVKs

Two days vocational training programmes conducted for rural youth for promoting self employment & skill development. Rural youth were selected from tribal area village named Bhainsajhar block Kota. During the training programmes we demonstrated the cultivation of Oyster mushroom, marketing plan, nutritional values and other related information.

Training title	**Crop / Enterprise**	**Identified Thrust Area**	**Duration of training (days)**	**Number of Beneficiaries**					
				SC		ST		Others	
				M	F	M	F	M	F
Training on Mushroom Production technology	Mushroom	Unemployment / Income generation	02	-	-	7	-	2	-

9.0 Seed Production Programme & Crop Cafeteria at KVK Farm

204.8qt seed production in 6 ha under seed production programme of Paddy Variety Karma Masuri during Kharif & 82qt Wheat (variety GW-273) has been produced in KVK farm during Rabi 2012-13.

Apart from seed production programme crop cafeteria is one of the important components under Demonstration unit. During Kharif 9 varieties of Paddy and 18 varieties of Wheat were grown during Rabi as crop cafeteria. Okra (75 m^2), Tomato (75 m^2), Bottle guard (75 m^2) has been grown, as vegetable cafeteria in which 255 kg Tomato and 276 kg Bottle guard has been produced in the area of 75m^2 each.

Four Species of Oyster Mushroom has been cultivated in Demonstration unit.

Name of Component of Park	Detail Information (If established)
Crop Cafeteria	Different crops Wheat, Mustard, Gram, Safflower
Vegetable Cafeteria	Different vegetable Pea, Tomato, Chilli, Bottle gourd
Mushroom	Cultivation of four different type of oyster (*Plurotus*) Mushroom
Technology Desk	Publication of cultivation and related technology dissemination

Agro Technological Park

चने की जैविक खेती का मॉडल

Crop Cafeteria

Agro-foresty

Mushroom Unit

Dairy Unit

Vegetable Cultivation

10.0 Krishak Sangawari

S.N.	Total No. of Krishak Sangwari	Training Details		No. of village	No. of Training given
		Training No.	KS No		
1.	793	53	1956	816	209

Krishak Sangwari Training




11.0 Soil sample analysis

20

12.0 Kisan Mela & field day

Conducted 02 kisan mela at block level. A technology is transferred through trainings, demonstration, OFT's, FLD's, news letters & articles (*Indira Kisan Mitan*).

S. No.	Date	Block / District	Important features dignitaries attended
1.	12.12.2012	Navgawa (Bilha)	Shri Naresh Kaushik, (Member, Zila Panchayat, Bilaspur) Dr. C.R. Gupta, Dean, TCBCARS, Bilaspur Shri Rajesh Suryawanshi, (Member, Zila Panchayat, Bilaspur) Shri Anil Pandey, Vidhayak Pratinidhi, Beltara
2.	08.02.2013	Gondaiya (Bilha)	Shri Badridhar Diwan, (MLA, Beltara) Shri S.C. Padam, JDA, Bilaspur Dr. C.R. Gupta, Dean, TCBCARS, Bilaspur Shri Chiranjeev Sarkar, DDA, Bilaspur Shri Vijaydhar Diwan, (Vidhayak Pratinidhi, Beltara)
3.	03.02.2013	Bhaisajhar (Kota)	Shri Bhagwat Singh Uike, Member, Janpad Panchayat, Kota Shri Sanjay Dhurve, President, Adarsh Farmer Club, Bhaisajhar
4.	25.03.2013	Navgawa (Bilha)	Shir Sukul Ram Suryawanshi, Ex-Head Master, Navgawa
5.	28.03.2013	Risda (Masturi)	Dharmendra Pal Singh (Sarpanch, Risda) Shri Ajay Singh, Shri Digpal Singh (Progressive Farmer)

राज्यस्तरीय किसान मेला रायपुर में केन्द्र के प्रदर्शनी का अवलोकन करते हुए केन्द्रीय कृषि मंत्री श्री शरद पवार, मुख्य मंत्री छग. शासन डॉ. रमन सिंग, कुलपति डॉ. एस.के.पाटिल, इं.गा.कृ.वि., रायपुर (छ.ग.)

राज्यस्तरीय किसान मेला में बिलासपुर जिले के किसानों के साथ भागीदारी

नवगवां में किसान मेला एवं कृषक–वैज्ञानिक संगोष्ठी

कृषि विज्ञान केन्द्र एवं कृषि विभाग, बिलासपुर के संयुक्त तत्वावधान में बिल्हा विकासखण्ड के ग्राम नवगवां में दिनांक 12.12.2012 को सभापति राजस्व स्थायी, शिक्षा एवं कृषि समिति एवं जिला पंचायत सदस्य नरेश कौशिक के मुख्य अतिथि एवं डॉ. सी.आर. गुप्ता, अधिष्ठाता, ठा.छे.ला.बै.कृषि महाविद्यालय, जिला पंचायत सदस्य, राजेश सूर्यवंशी, विधायक प्रतिनिधि, अनिल पाण्डेय, विधानसभा क्षेत्र बेलतरा के विशेष अतिथि की उपस्थिति में राष्ट्रीय कृषि विकास योजना के तहत आयोजित किसान मेला, कृषि प्रदर्शनी एवं कृषक संगोष्ठी कार्यक्रम सम्पन्न हुआ।

उपस्थित जन प्रतिनिधियों ने इस छोटे से गांव में किसान मेला जैसे कार्यक्रम के आयोजन द्वारा किसानों को नई कृषि जानकारी देने के लिए कृषि विज्ञान केन्द्र के वैज्ञानिकों को बधाई दिया। कार्यक्रम के मुख्य अतिथि, नरेश कौशिक ने गांव में इस प्रकार के आयोजन की सराहना करते हुए किसानों को वैज्ञानिकों द्वारा बतायी गई उन्नत कृषि तकनीकी को अपनाकर अधिक से अधिक फसल उत्पादन लेने हेतु प्रेरित करते हुए कहा कि कृषि की समस्याओं का निराकरण हमेशा कृषि विज्ञान केन्द्र के वैज्ञानिकों के परामर्श से करने पर आपको हमेशा आर्थिक

लाभ होगा। इससे छत्तीसगढ़ राज्य के किसान समृद्धशाली होंगे। कृषि विज्ञान केन्द्र द्वारा इस पिछड़े ग्राम में किसान मेला का आयोजन किसानों के लिए गौरव की बात है।

नवगवां (बिल्हा) में आयोजित किसान मेला में मुख्य अतिथि श्री नरेश कौशिक जिला पंचायत सदस्य एवं अन्य

गोंदईया में किसान मेला एवं कृषक–वैज्ञानिक संगोष्ठी

कृषि विज्ञान केन्द्र, बिलासपुर द्वारा दिनांक 08.02.2013 को बिल्हा विकास खण्ड के ग्राम गोंदईया में बद्रीधर दीवान, माननीय विधायक एवं अध्यक्ष छत्तीसगढ़ राज्य औद्योगिक विकास निगम, विधानसभा क्षेत्र बेलतरा मुख्य अतिथि, एस.सी. पदम, संयुक्त संचालक कृषि की अध्यक्षता, विशिष्ट अतिथि डॉ.सी.आर. गुप्ता, अधिष्ठाता, कृषि महाविद्यालय बिलासपुर, उपसंचालक कृषि, चिरंजीव सरकार, विजयधर दीवान, बजरंग कश्यप, जनपद उपाध्यक्ष एवं कार्यक्रम समन्वयक, डॉ. आर. एन. शर्मा की उपस्थिति में किसान मेला कार्यक्रम मनाया गया। कार्यक्रम के अतिथि विजयधर दीवान, विधायक प्रतिनिधि ने कहा कि क्षेत्र के विकास के लिए हम पूरी तरह समर्पित भावना से काम कर रहे हैं, जिससे क्षेत्र के किसानों का विकास हो रहा है। कार्यक्रम के मुख्य अतिथि बद्रीधर दीवान, माननीय विधायक एवं अध्यक्ष छत्तीसगढ़ राज्य औद्योगिक विकास निगम, ने कहा कि लच्छनपुर जल अपवर्तन परियोजना के आरंभ होने से क्षेत्र के किसानों को फसलों हेतु सिंचाई पानी की उपलब्धता होगी, इससे क्षेत्र के किसानों का खेती में सिंचित रकबा बढ़ेगा और किसान लाभान्वित होकर फसल से अधिक उत्पादन प्राप्त करेंगे। मेला कार्यक्रम में मुख्य अतिथि एवं अतिथियों द्वारा क्षेत्र के प्रगतिशील किसानों को इंदिरा गांधी कृषि विश्वविद्यालय, रायपुर से प्रकाशित कृषि तकनीकी से भरपूर कृषि डायरी एवं कृषि पंचाग साहित्यों का वितरण किया गया, इसके साथ ही कृषि विभाग द्वारा 5 किसानों को मक्का प्रदर्शन

कार्यक्रम के लिए बीज वितरण किया गया। इस अवसर पर ग्राम अमतरा, लच्छनपुर, गोंदईया, नवगवां, कलमीटार, कच्छार, पेंडरवा, चुमकवां, सेमरी, सेमरा, रानीगांव इत्यादि गांव के 500 से अधिक कृषकों को विश्वविद्यालय द्वारा प्रकाशित तकनीकी से भरपूर कृषि पंचाग कैलेंडर निःशुल्क वितरित किया गया।

गोंदईया (बिल्हा) में आयोजित किसान के मुख्य अतिथि श्री बद्रीधर दिवान विद्यालय बेलतरा (अध्यक्ष CSIDC) एवं अन्य

रिसदा में कृषक दिवस मनाया गया

कृषि विज्ञान केन्द्र, बिलासपुर द्वारा दिनांक 28.03.2013 को राष्ट्रीय कृषि विकास योजना के तहत् प्रदर्शित गेहूँ बीज उत्पादन कार्यक्रम पर मस्तूरी विकास खण्ड के ग्राम रिसदा में प्रगतिशील कृषक अजय सिंह के मुख्य अतिथि, दिगपाल सिंह के विशिष्ठ अतिथि, ग्राम सरपंच धर्मेन्द्र पाल सिंह की अध्यक्षता उपस्थिति में कृषक दिवस कार्यक्रम सम्पन्न हुआ।

गेहूँ बीज उत्पादन कार्यक्रम ग्राम के 20 किसानों के 20 हेक्टेयर रकबे में लिया गया जिसमें किसानो को कार्यक्रम के पूर्व एवं मध्य में तकनीकी प्रशिक्षण आयोजित कर जानकारी दी गयी थी साथ ही चयनित कृषकों को गेहूँ का आधार बीज एवं उर्वरक निःशुल्क प्रदान किया गया। कार्यक्रम में उपस्थित सभी कृषकों को इंदिरा गांधी कृषि विश्वविद्यालय, रायपुर द्वारा प्रकाशित कृषि युग पंचांग निःशुल्क प्रदान किया गया है जिसमें उपलब्ध तकनीकी जानकारी को किसान अपनाकर फसल उत्पादन अधिक प्राप्त कर, कृषि तकनीकी अंगीकरण में अपनी सक्रिय भूमिका अपना सकते है।

13. Convergence with ATMA and other

S No.	Name of programme	Type of collaboration	Activities performed jointly
1	ATMA	As resource person & member	Training & monitoring, exposure visit
2	ISOPAM	As resource person	Training & monitoring exposure visit
3	AGRIl. ENGG.	As resource person	Conducted Training programme
4	NABARD	As resource person	Interactive meeting on Agr. Issue
5	KRIBHKO	As resource person	Krishak Goshthi
6	IFFCO	As resource person	Training & monitoring
7	RKVY	As resource person	Training
8	MAHILA BAL VIKAS	As resource person	Conducted Training programme

14. Seed production progammes

	Crop	No. of Demo	Area Ha	No. of bene.	Yield (Local check)	Average yield Demo. q/ha	% increase in yield
1. Cereal	Wheat	20	20	20	19.49	25.4	30.32

RKVY Funded Projects
Seed Production during Rabi in farmers' field

S. No.	Crop / Variety	Name of farmers / Village / Block / Mobile No.	Mobile No.	Area under seed production (ha)	Registration / Grade	Quality seed produce (q)	
						Raw	Actual
1	Wheat / GW-273 C1	Shri Radhavendra Sigh Chandel Vill. Risda (Masturi)	9827467991	01	C_1	41.0	32.5
2	Wheat / GW-273 C1	Shri Suresh Sigh Chandel Vill. Risda (Masturi)	9302709971	01	C_1	32.0	25.4
3	Wheat / GW-273 C1	Shri Akhalesh Sigh Chandel Vill. Risda (Masturi)	9754475875	01	C_1	40.0	32
4	Wheat / GW-273 C1	Shri Naval Kishor Sigh Vill. Risda (Masturi)	9827878731	01	C_1	30.5	22.8
5	Wheat / GW-273 C1	Shri Pramod Sigh Chandel Vill. Risda (Masturi)	7898696802	01	C_1	29.4	22.1
6	Wheat / GW-273 C1	Shri Mukesh Sigh Chandel Vill.	7865751996	01	C_1	31.8	25

		Risda (Masturi)					
7	Wheat / GW-273 C1	Shri Pradip Sigh Chandel Vill. Risda (Masturi)	8183770927	01	C_1	33.6	26
8	Wheat / GW-273 C1	Shri Ram Nivasi Sigh Chandel Vill. Risda (Masturi)	9179654193	01	C_1	30.7	24.5
9	Wheat / GW-273 C1	Shrimati Malti Sigh Vill. Risda (Masturi)	-	01	C_1	29.8	23.12
10	Wheat / GW-273 C1	Shri Yajuvendra Sigh Chandel Vill. Risda (Masturi)	9981835886	01	C_1	30.0	24
11	Wheat / GW-273 C1	Shrimati Ragani Sigh Vill. Risda (Masturi)	9827878637	01	C_1	31.4	25
12	Wheat / GW-273 C1	Shrimati Nalini Sigh Vill. Risda (Masturi)	9302709971	01	C_1	29.3	22.6
13	Wheat / GW-273 C1	Shrimati Anupama Sigh Vill. Risda (Masturi)	9179728282	01	C_1	30.8	24
14	Wheat / GW-273 C1	Shri Dhirendra Sigh Vill. Risda (Masturi)	9752112596	01	C_1	34.9	28.8
15	Wheat / GW-273 C1	Shrimati Subhasini sigh Vill. Risda (Masturi)	9302709971	01	C_1	32.1	25
16	Wheat / GW-273 C1	Shri Svapnil Agrawal Vill. Kachhar Block Bilha	9425227398	01	C_1	31.2	24
17	Wheat / GW-273 C1	Shri Santosh Agrawal Vill. Baniyadih Block Bilha	9827153082	01	C_1	32.3	25.1
18	Wheat / GW-273 C1	Shri Kamlesh sigh Vill. Sendri Block Bilha	8827262524	01	C_1	32.0	25
19	Wheat / GW-273 C1	Shri Bharat Kumal Khetrapal Vill. Mopka Block Bilha	982 7114005	01	C_1	29.4	22.3
20	Wheat / GW-273 C1	Shri Arun Khetrapal Vill. Mopka Block Bilha	9827114005	01	C_1	32.5	25

Seed Production Programme on Wheat Var- GW 273

Training Programme Conducted before seed production programme

15. Farm facilities developed through RKVY,TSP & others

Farm Facilities under RKVY:-

S. No.	Item Purchased (> Rs. 5000/-)	Quantity	Amount (Rs.)	Purpose/Use of Item (Specify area/length in case of fencing, irrigation facilities etc.)
1	Cultivator	1	19425.00	for farm use
2	Leveller	1	11550.00	land levelling
3	Tractor Trolly	1	175812.00	loading unloading & transportation
4	Chaff Cutter	1	20988.00	cutting fodder
5	M.B. Plough	1	20738.00	for farm land preparation
6	Power Tiller	1	161300.00	for farm work
7	Reaper self propeller	1	120000.00	for farm work
8	Multicrop Thressor 25 Hp.	1	160000.00	for thressing of different crops
9	Seed dril cum fertilizer dril	1	40950.00	for sowing
10	Electric weighing machine	1	18314.00	for weighing of seeds
11	Winnowing Fan	1	4834.00	for winnowing purpose
12	Cement Pole and barbed wire	200 no. 800 kg.	99404.00	for fencing
13	Construction of Pond	70mX20 mX2m	149610.00	for fisherey
14	Shaping and Bunding		99991.00	
15	Seed grader	1	386706.00	for grading of seeds
16	Horizontal Laminarflow	1	114912.00	For Mushroom Production Unit
17	Auto Claue 78 ltr	1	42899.00	For Mushroom Production Unit
18	BOD Incubator	1	48030.00	For Mushroom Production Unit
19	Humidity meter	1	1383.00	For Mushroom Production Unit
20	Binocular Compound microscope	1	35908.00	For Mushroom Production Unit
21	Hot air oven	1	29177.00	For Mushroom Production Unit
22	Air Circulating fan	1	1751.00	For Mushroom Production Unit
23	Digital display lamp Indicator	1	4175.00	For Mushroom Production Unit
24	Traonacular compound microscope with imaging facilities	1	141230.00	For Mushroom Production Unit
25	Cylinder gas deposit	2	3400.00	For Mushroom Production Unit
26	Cylinder Reffil	2	3407.00	For Mushroom Production Unit
27	Casier card	1	35.00	For Mushroom Production Unit
28	Insulator	1	40.00	For Mushroom Production Unit
29	High pressure Regulator	1	350.00	For Mushroom Production Unit
30	Soskha Hase	3	570.00	For Mushroom Production Unit
31	Sotove Agni	1	1975.00	For Mushroom Production Unit
32	5 Racks SF 1960001058 Angle Iron Racks (1980x900x450 mm)	10	25250.00	For Mushroom Production Unit
33	SF 19E0001053 Angle Iron Racks (900x500x300 mm)	1	700.00	For Mushroom Production Unit
		Vat	3633.00	

34	Selling machine 16 inch & 12 inch	1	4674.00	For Mushroom Production Unit
35	Platform type weighieing balance weighing capacity 30 kg with LED display of 6 segment 13 mm high with platform size of 240X290 mm of SS Chemical & Glassware	1	6669.00	For Mushroom Production Unit
36	PVC pipes ISI marked IS4985 50mmX6 kg/cm^2	102 mtr.	4712.40	For Mushroom Production Unit
37	laleral tube ISI marked ISI2786 16 mm fogger with leak prevention device	400 Mtr.	3200.00	For Mushroom Production Unit
38	High pressure 4	110 no.	10890.00	For Mushroom Production Unit
39	Grommate take off 16/13 mm	40 no.	130.00	For Mushroom Production Unit
40	Barbed Nipple/Connector 16 mm	40 no.	92.00	For Mushroom Production Unit
41	Barbed end cap 16 mm	40 no.	104.00	For Mushroom Production Unit
42	control value 50 mm	5 no.	2501.00	For Mushroom Production Unit
43	Double action ARV 1"	3 N	1798.05	For Mushroom Production Unit
44	Flush Value 50 mm	4 N	292.00	For Mushroom Production Unit
45	Screen filter 15 m3/hrx1.5"	1 N	3448.05	For Mushroom Production Unit
46	PVC & GI fittings	1 lit	2475.00	For Mushroom Production Unit
	Pressure Cooker (18 lit.)	1	2450.00	For Mushroom Production Unit
47	Computer ACER with Web Cam	1	39348.81	For Computer work and KMA at KVK Bilaspur
48	Laser Printer with Scanner HP	1	11077.50	For Computer work and KMA at KVK Bilaspur
49	UPS System	1	5830.65	For Computer work and KMA at KVK Bilaspur
Total : -			**2048139.46**	

16. KVK to Research System

Feedback
Farmer's reaction was positive towards technology taken in On farm trials.
Farmers are impressive for Mushroom production, needs to identify and cultivation technology of Medicinal mushrooms which we help to develop human health and income generation.
Insect and disease is major problem in crop production required to developed eco-friendly management and research on indigenous management technology of pests.

17. Processing & value addition

Conducted training under value addition of mushrooms and fruit and vegetables at our KVK unit.

18.Women empowerment activities

Trainings

19. Capacity building of KVK staff details

Name	Date	Programme
Smt. Sushila Ohdar Programme Assistant (Compurter)	5-6 Dec. 2012	Orientation progaramme of Programme Assistant (Computer) on dated 5-6 December 2012 at DES, Raipur.
Shri Vinod Nirmalkar SMS (Plant Pathology)	13-15 Dec.2012	Orientation programme of SMS on dated 13th. 15 th December 2012 at DES, Raipur
Smt. Shilpa Kausik SMS (Agronomy)	19-21 Dec. 2012	Data analysis and capacity building on dated 19-21 December 2012 at Statistical Department at I.G.K.V., Raipur
Smt. Shilpa Kausik SMS (Agronomy)	26-29 Dec. 2012	Soil water and plant analysis on dated 26-29 December 2012
Smt. Sushila Ohdar Programme Assistant (Compurter)	28 Jan -2 Feb 2013	Knowledge management system and Web designing and for agriculture and allied fields on dated 28 Jan-2 Feb 2013 at EEI (WR)AAU, Anand Gujarat
Shri Vinod Nirmalkar SMS (Plant Pathology)	4-9 March 2013	Six days orientation course on plant protection and mushroom cultivation technology 4- 9 March 2013 at Department of plant pathology and Entomology at COA, Raipur
Shri Devendra Upadhyay SMS ((Horticulture)	21-22 March 2013	Two days Mobile based E-extension services on dated 21 th- 22th March 2013 at MANAGE, Hyderabad.

20. Award to scientist and farmers

Name of award /awardee	Type of award (Ind./Group/Inst./Farmer)	Awarding Organizations	Amount received
Devnath Dewangan	Farmer	State agriculture (Bilaspur DDA)	Rs 25000/-
Nevidita Pathak	Individual	ICAR Asia Pacific Global Conference New Delhi	Appreciation Letter From DDG
Chait Ram Yadav	Farmer	Paryawaran and Paryatan Vikash Society Bilaspur	Certificates
Bagwati Prasad Patel	Farmer	Paryawaran and Paryatan Vikash Society Bilaspur	Certificates
KVK Bilaspur	Institutional	Paryawaran and Paryatan Vikash Society Bilaspur	Certificates on Exhibition of different products i.e. Mushrooms, Flowers, Jams jelly, Vegetables etc. Total 07
Vinod Nirmalkar	Individual	Paryawaran and Paryatan Vikash Society Bilaspur	Certificates for Mushroom production awarness
KVK Bilaspur	Institutional	Haribhumi Editor, Bilaspur	कृषि विकास में समाचार पत्रों के माध्यम से कृ.वि.के. बिलासपुर की भूमिका

21. Case study and Success Story

21.1 सफल कृषक – देवी प्रसाद यादव

देवी प्रसाद यादव, ग्राम– लालपुर, तहसील– कोटा, जिला– बिलासपुर का निवासी हूँ। मेरे पास 10 एकड़ जमीन है जिसमें से 5 एकड़ सिंचित है और 5 एकड़ असिंचित है। सिंचित ट्यूबवेल वाले खेत में स्वर्णा, एच. एम. टी. धान की रोपाई करवाता हूँ।

रोपाई से पहले जमीन की तैयारी करने की विधि :– मेरे द्वारा लगभग 30 वर्षों से खेती की जा रही है। मैं सबसे पहले मिट्टी का परीक्षण करवाता हूँ ये मिट्टी परीक्षण संबंधी जानकारी मुझे कृषि विज्ञान केन्द्र, बिलासपुर के डॉ. दिनेश शर्मा, विनम्रता मेडम द्वारा मिली है और साथ ही साथ आकाशवाणी से प्रसारित किसान वाणी कार्यक्रम सुनता था।

अप्रैल–मई के माह में अकरस जुताई करता हूँ, जिससे कीड़े–बीमारी के साथ–साथ खरपतवार का खेत में प्रकोप कम होता है और इस तरह से अकरस जुताई करके आर्थिक रूप से फायदा मिलता है खर्च में बचत होती है। मैं ''श्री पद्धति'' से धान की रोपाई करता हूँ जिससे पहले की अपेक्षा आधे खर्च में रोपाई का कार्य पूर्ण हो जाता है। जैसे पहले एक एकड़ भूइंया की रोपाई के लिये 2500 रूपये लगता था, इस पद्धति में एक एकड़ में 1200 रूपये में ही रोपाई हो जाती है। धान कतार में लगाने से पौधे को खाद, हवा, पानी उचित मात्रा में ले पाते है इससे धान में कंसा अधिक निकलते है जो 50–60 तक की संख्या में प्रत्येक धान के पौधे में होते हैं इससे फसल अच्छी होता हैं। असिंचित खेती में प्रति एकड़ धान की उपज 15 क्विंटल और सिंचित खेती में 25 क्विंटल के लगभग होता हैं। ''श्री पद्धति '' में बीज की मात्रा प्रति एकड़ 5 कि.ग्रा. और बोनी विधि में 40 कि.ग्रा ., गोबर खाद की मात्रा 2 ट्रेक्टर प्रति एकड़ उपयोग करतें है।

मुझे कृषि विज्ञान केन्द्र द्वारा लगातार सतत प्रशिक्षण व मार्गदर्शन पूरे फसल अवधि के दौरान प्राप्त होता रहा है। इसकें अतिरिक्त चने की फसल की किस्म जे जी 11 के प्रर्दशन से लगभग दुगुनी उपज प्राप्त हुई । इसके अतिरिक्त राष्ट्रीय कृषि विकास योजना के तहत मुझे एवं ग्राम वासियों को मशरूम एवं फल परिरिक्षण पर प्रशिक्षण प्राप्त हुआ है जिससे हमारी अतिरिक्त आय बढी है एवं पोषण स्तर सुधरा है।

अंतिम में सभी किसान भाईयों को बताना चाहता हूँ कि अच्छी लगन से वैज्ञानिकों के मार्गदर्शन में खेती करें तब खेती से अधिक फायदा मिलेगा।

21.2 रबी फसल में सब्जी उगाकर लाभ प्राप्ति
कृषक – श्री मुरली प्रसाद जी

ये कहानी ऐसी है जिन्होने अपने खेत में धान, गेहूँ के साथ सब्जी की खेती का उपयोग किया। इसके पास खेती के लिये यंत्र तो उपलब्ध न था परन्तु अपनी मेहनत एवं कृषि वैज्ञानिकों की जानकारी से लाभ कमाया। ये किसान का नाम श्री मुरली प्रसाद जी जो की ग्राम धूमा के निवासी है। धूमा गाँव बिलासपुर जिले के बिल्हा तहसील के अंतर्गत एक छोटा सा गाँव है। श्री मुरली प्रसाद जी का जन्म एक किसान परिवार में हुआ था। इन्होने पढ़ाई के साथ–साथ पिताजी को कृषि में हाथ बटाते थे। इन्होने गुरू घासीदास विश्वविद्यालय से हिन्दी समाजशास्त्र में स्नातकोत्तर किये है।

श्री मुरली प्रसाद जी से उनके खेती की जानकारी लेते कृषि महाविद्यालय एवं अनुसंधान केन्द्र बिलासपुर के 3 वर्ष तथा कई वर्षो तक पास के ग्राम दर्रीघाट के हायर सेकेन्ड्री स्कूल उच्च श्रेणी शिक्षक के रूप में पदस्थ थे। सेवा निवृत्त होने के पश्चात् इन्होंने कुछ वर्ष तक पुराने पद्धति से खेती की। जिससे की इन्हे अधिक लाभ प्राप्त नहीं हुआ। तत्पश्चात् इन्होने कृषि वैज्ञानिकों एवं कृषि समाचारों में रखकर सब्जी की सही तरह से खेती कर लाभ कमाया। इनके पास 5 एकड़ जमीन है जिससे इन्होने एक ट्यूबवेल की सुविधा भी करवा रखी है। अपने खेत के 3 एकड़ हिस्से में सब्जी की खेती की, और 15 हजार से भी अधिक धन राशि प्राप्त कर चूके है। इस प्रकार श्री मुरली प्रसाद जी ने कृषि में अपना जीविका का अच्छा साधन प्राप्त कर लिया है। लेकिन फसलों को बंदरों से अधिक हानि पहुँचता है और खेती के समीप स्थित् कारखाने में धुएँ में सब्जी को काफी हानि पहुँचती है।

22.0 Publication

22.1 Literature developed/published

KVK Name	Type	Title	Author's name	Number of copies
Bilaspur	Bulletin	फल दार पौधों की प्रर्वधन विधि एवं पौध तैयार करना	Devendra Upadhyay and Dr. R. N. Sharma	1000
	Manual	लोक प्रिय समाचार पत्रों में कृषि विज्ञान केन्द्र बिलासपुर (1996–2004)	Dr. D.K. Sharma and Others	10
	Manual	कृषि विकास में समाचार पत्रों के माध्यम से कृषि विज्ञान केन्द्र बिलासपुर की भूमिका (2007–2012)	Dr. D.K. Sharma and Others	30
	Manual	जलवायु परिर्वतन पर आधारित फसल एवं	Shilpla Kausik and	1000

		कृषि पद्वति	Others	
	Folder	आयस्टर मशरूम की उन्नत उत्पादन तकनीकी	Vinod Nirmalkar and Others	1000
	Pamphlet	प्याज उत्पादन तकनीक	Devendra Upadhyay and others	500
	Pamphlet	गेहूँ, चना एवं सरसों के प्रमुख रोग, लक्षण एवं प्रबंधन	Vinod Nirmalkar and Others	500
	Pamphlet	मानव एवं पर्यावरण सुरक्षा हेतु जैविक खेती अपनाईये	Dr. D.K. Sharma and Others	500
	Pamphlet	आंवले के परिरक्षित उत्पाद	Kiran Gupta and Others	500
	Pamphlet	रबी में लगाई जानं वाली दलहन एवं तिलहन फसलों की उत्पादन तकनीक	Shilpa Kausik and Others	500
	Pamphlet	गेंहूँ की उत्पादन तकनीक	Shilpa Kausik and Others	500
	Pamphlet	कृषि यंत्रो का उपयोग कर श्रम व समय की बचत करें।	Eng. Umesh Kumar Dhruv and Others	500

Type	Title	Authors name	Number of copies
Popular Article			
Indira Kisan Mitan April- June 2012	ग्रीष्मकालीन जुताई का महत्व	Er.U.K.Dhruv, Dr.D.K.Sharma & Smt.N.Pathak	500
Indira Kisan Mitan, April- June 2012	मृदा स्वास्थ्य हेतु हरी खाद	Smt.V.Jain, Dr.D.K.Sharma & Smt.N.Pathak	500
Indira Kisan Mitan, April- June 2012	उन्न्त विधि से नर्सरी प्रबंधन	Dr.R.N.Sharma,Dr.S.K. Upadhyay	500
Indira Kisan Mitan , April- June 2012	खरीफ फसलों की उन्नत तकनीकी	Dr.R.N.Sharma ,Dr. V.Jain	500
Indira Kisan Mitan, April- June 2012	समसामयिक सलाह	Dr. D.K.Sharma	500
Indira Kisan Mitan July-Sept 2012	खरीफ फसलों की बुवाई हेतु उपयोगी कृषि यंत्र	Er. U.K.Dhruw , Dr. D.K.Sharma & Dr. S.K.Upadhyay	500
Indira Kisan Mitan July-Sept 2012	वर्षा ऋतु में शुद्ध पेय जल	Smt.N.Pathak, Dr. R.N.Sharma, Dr.D.K.Sharma	500
Indira Kisan Mitan July-Sept 2012	खरीफ,दलहन एवं तिलहन फसलों की उन्नत उत्पादन तकनीक	Dr. V.Jain, Dr.R.N.Sharma, Dr.D.K.Sharma	500
Indira Kisan Mitan July-Sept2012	धान उत्पादन की SRI पद्धति	Dr.S.K. Upadhyay, Dr.R.N.Sharma, Dr.V.Jain, Smt.N.Pathak	500
Indira Kisan Mitan July-Sept 2012	समसामयिक सलाह	Dr. D.K.Sharma	500
Indira Kisan Mitan Oct- Dec. 2012	रबी फसलों में बीजोपचार का महत्व एवं रोग नियंत्रण	Sh.Vinod Nirmalkar, Dr.D.K. Sharma & Dr.R.N.Sharma	500
Indira Kisan Mitan Oct- Dec. 2012	रबी फसलों की उत्पादन तकनीक	Smt. Shilpa Kaushik, Dr. R.N.Sharma, Dr. D.K.Sharma & Dr.Kiran Gupta	500
Indira Kisan Mitan Oct.- Dec. 2012	रबी सब्जियों की कृषि कार्यमाला	Sh.Devendra Upadhyay, Dr. D.K.Sharma, Dr.R.N. Sharma, Smt.Shilpa Kaushik	500
Indira Kisan Mitan Oct.-Dec. 2012	उतेरा पद्धति में अधिक उत्पादन लेने के लिए उन्नत तकनीकी	Dr.V.Jain, Dr.R.N.Sharma, Dr. D.K.Sharma & Smt.N.Pathak	500

Indira Kisan Mitan Oct.-Dec. 2012	कटाई हेतु उपयोगी कृषि यंत्र	Er.U.K. Dhruv	500
Indira Kisan Mitan Oct.-Dec. 2012	गेहूँ उत्पादन की उन्नत तकनीकी	Dr. D.K.Sharma	500
Indira Kisan Mitan Oct.-Dec. 2012	समसामयिक सलाह	Dr. D.K.Sharma	500
Indira Kisan Mitan Jan.-March 2013	गेहूँ में जल प्रबंधन	D.K.Sharma, Dr.R.N. Sharma, Smt.Shilpa Kaushik	500
Indira Kisan Mitan Jan.-March 2013	ग्रीष्मकालीन मक्का एक लाभकारी फसल का विकल्प	Smt.Shilpa Kaushik, Sh.Vinod Nirmalkar, Dr. D.K.Sharma & Dr.Kiran Gupta	500
Indira Kisan Mitan Jan.-March 2013	सुरक्षित अनाज भण्डारण के लिए आवश्यक सुझाव	Er.U.K. Dhruv, Dr.Kiran Gupta, Dr. D.K.Sharma & Dr. P.C. Chaurasiya	500
Indira Kisan Mitan Jan.-March 2013	रबी फसलों के प्रमुख रोग, लक्षण एवं प्रबंधन	Sh.Vinod Nirmalkar, Smt.Shilpa Kaushik, Dr. D.K.Sharma	500
Indira Kisan Mitan Jan.-March 2013	समसामयिक सलाह	Dr. D.K.Sharma	500

22.2 Research Paper

Nirmalkar, Vinod., Sharma D.K., Sharma, R.N. and Gupta, Kiran (2013). Weather risk Management of medicinal plants in Bilaspur district of Chhattisgrh. Paper presented in National Symposium on Climate change and Indian agriculture: Slicing down the uncertainties organigsed by association of agrometrologist – AP chapter, at CRIDA Hyderabad, January 22-23, 2013.p-74

Sharma D.K., Upadhyay, Devendra, Dhruw, Umesh., Nirmalkar, Vinod Kaushik, shilpa, Sharma R.N. and Gupta, Kiran (2012). Assesment of training needs of paddy cultivators in Bilaspur district of Chhattisgrh. Paper presented in international Conference on "Extension Education in the perspective of advances in natural resource management in agriculture (NARAM-IV)" at RAU, Bikaner Rajasthan December 19-21,2012.p-.

Sharma D.K., Shulka R.K., Sharma G.,Jain V., Dhruw U.K., Pathak N. ,and Upadhyay S.K.(2012). A case study- Raghwendra Chandel Through transfer of Technology of KVK, Bilaspur. Paper presented in National Conference on "Demonstrated Option for Inproved Livelihood in Disadvantaged Areas of India" January 20-21, 2012.p-151

Pathak, N., Sharma, D.K., Sharma, R.N. (2012). Tailoring- an generating enterprises success storey of Smt. Rajani Yadav. Paper presented National seminar on woman entrepreneurship resent trend & opportunity in Home Science September 26-27th 2012.

Shukla, R.K., Sharma, D.K., Jain, V., Dhruw, U.K., Pathak, N. and Upadhyay, S.K. (2012). Socio-economic devlopemnt of Bilaspur district through krishi vigyan Kendra. Under-Subhesh Feb-April 2012 Pp-52-53

22.3 Popular article

1. डॉ.शर्मा, डी.के.,निर्मलकर विनोद एवं डॉ. शर्मा आर.एन. (2013). खेती के लिए अनुकूल पर्यावरण तैयार करें, छत्तीसगढ़ संदर्भ बिलासपुर, अंक 8, फरवरी 2013।
2. डॉ.शर्मा, डी.के.,निर्मलकर विनोद एवं डॉ. शर्मा आर.एन. (2013). सफलता की कहानी–कृषक की जुबानी, सफल कृषक–देवी प्रसाद यादव, छत्तीसगढ़ संदर्भ बिलासपुर, अंक 8, फरवरी 2013।
3. डॉ.शर्मा, डी.के.,निर्मलकर विनोद एवं डॉ. शर्मा आर.एन. (2013). मानव एवं पर्यावरण सुरक्षा हेतु जैविक खेती अपनाईये– गेहूँ फसल की जैविक खेती, छत्तीसगढ़ संदर्भ बिलासपुर, अंक 5, नवम्बर 2012।
4. कौशिक शिल्पा, डॉ.शर्मा, डी.के. एवं डॉ. शर्मा आर.एन. (2012). जलवायु परिवर्तन पर आधारित कृषि पद्धतियां, छत्तीसगढ़ संदर्भ बिलासपुर, अंक 4, अक्टूबर 2012।
5. जैन विनम्रता, डॉ. शर्मा आर.एन., डॉ.शर्मा, डी.के एवं पाठक निवेदिता (2012). उतेरा पद्धति में अधिक उत्पादन लेने के लिए उन्नत तकनीक, छत्तीसगढ़ संदर्भ बिलासपुर, अंक 4, अक्टूबर 2012।
6. डॉ.शर्मा, डी.के., डॉ.जैन व्ही., ध्रुव उमेश, पाठक निवेदिता एवं डॉ. शर्मा आर.एन. (2012). धान की मेडागास्कर पद्धति कृषकों के लिए लाभदायक, छत्तीसगढ़ संदर्भ बिलासपुर, अंक 2, अगस्त 2012।
7. डॉ.शर्मा, डी.के., डॉ.जैन व्ही., ध्रुव उमेश, पाठक निवेदिता, डॉ. उपाध्याय एस.के. एवं डॉ. शर्मा आर.एन. (2012). कृषि दर्शन – सघन कृषि पद्धति से खेती में सफलता में नवोन्वेशी कृषक, छत्तीसगढ़ संदर्भ बिलासपुर, अंक 2, अगस्त 2012।
8. डॉ.शर्मा, डी.के., डॉ.जैन व्ही., ध्रुव उमेश, पाठक निवेदिता, डॉ. उपाध्याय एस.के. एवं डॉ. शर्मा आर.एन. (2012). कृषि दर्शन – सब्जी उत्पादन के नवोन्वेशी कृषक, छत्तीसगढ़ संदर्भ बिलासपुर, अंक 1, जुलाई 2012।
9. डॉ. शुक्ला आर.के., डॉ.शर्मा, डी.के., डॉ. अवस्थी ए.के., पाठक निवेदिता, ध्रुव उमेश (2012). सफलता की कहानी–सफल कृषक – मुरली प्रसाद सेन की जुबानी, सुंदर–सुभेष, बिलासपुर, अंक 2,3,4 फरवरी–अप्रैल 2012।
10. डॉ. शुक्ला आर.के. (2012). किसानों के लिए उपयोगी भूरी खाद, सुंदर–सुभेष, बिलासपुर, अंक 5, 6 मई–जून 2012।

23. Horizontal spread of technology

KVK Name	Crop/ Enterprise	Thematic Area	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
Bilaspur	Soybean	Variatal Assessment	Line sowing, use of culture, improved variety	Training and Demonstration	08	150	260
Bilaspur	Pigeonpea	Variatal Assessment	Use of culture, improved variety	Training and Demonstration	12	95	276
Bilaspur	Sesamum	Variatal Assessment	improved variety	Training and Demonstration	08	45	65
Bilaspur	Paddy	Variatal Assessment	SRI method	Training and Demonstration	17	125	316

Bilaspur	Mustard (Rabi)	Variatal Assessment	improved variety	Training and Demonstration	05	76	218
Bilaspur	Chick pea (Rabi)	Variatal Assessment	Line sowing, seed treatment	Training and Demonstration	38	425	528
Bilaspur	Wheat (Rabi)	Variatal Assessment	Line sowing, seed treatment	Training and Demonstration	16	127	216
Bilaspur	Mushroom	Variatal Assessment	Chemical Treatment paddy straw	Training and Demonstration	-	-	-
Bilaspur	Tomato	Variatal Assessment	Seed treatment	Training and Demonstration	23	316	426
Bilaspur	Self Propelled reaper-Paddy	Farm Machinery	Self Propelled reaper	Training and Demonstration	56	1256	3560

24. Kisan Mela advisory & Technology impact

Name of Technology	Related with	purpose	Type of visitors
Soil Test	Students, farmers, officials, women	Soil health, and Income generation	Students, farmers, officials, women
IPM,Mass multiplication bio-agents, Bio-pesticides prepation etc	Plant protection	Farming community	Students, farmers, officials,Rural Youth, women
Fish production	Fisheries	Integrated model for income generation	Students, farmers, officials, women
Dairy unit	Animal rearing	Integrated model	Students, farmers, officials, women
Vermicompost NADEP	Organic farming	Soil health	Students, farmers, officials, women
Mushroom production technique	F/FW	Income generation, Cultivation and health	Students, farmers, officials, women, Rural youth

25. Production Units (bio-agents / bio pesticides/ bio fertilizers etc.)

25.1 Mushroom Unit :-

We are cultivated mushroom at our kvk sites, we are getting income from its. We cultivated four different types of oyster mushrooms i.e. *Pl. florida*, *Pl. oeus*, *Pl. hypsigygus*, *Pl. sajar kaju* for demonstration & training of farm and farm women. Other then mushrooms we are also demonstrated some high yielding varieties of vegetables i.e. Tomato (*Swarn Laxmi*), Radish (Pusa Chetaki), Pea (Arkile), Potato (Kufri Lalima), Chilli (Indu)

Name of the Product	Qty(Kg)	Amount (Rs.)		Remarks
		Cost of inputs	Gross income	
Mushroom production	12.25	432	980	Mushroom Income from January 2013
Tomato	255	500	1647	

Radish	41.50	80	207	
Pea	30.50	200	610	
Potato	45	120	450	

25.2 Planting Material production

We produce planting material of tomato seedlings & distributed to 13 farmers of Kormi village.

Major group/class	Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
					Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
										Distributed to 13 farmers
Seedlings	Tomato	September		0.05	Indu	Planting Material	500	-	-	

25.3 Dairy unit :

	Breed	Type of Produce	Qty.	Cost of inputs	Gross income
Cattle	**HF**	**Milk**	**10562.16 lt**	**25.00**	**264054.00**

Major Achievements

1. KVK was conducted 1st time seed production programme at farmers field village Mopka, Risda, Sendri, Kachhar and Baniyadih village of Bilha and Masturi Block. Seed production programme is taken in 20 ha with 20 beneficiary farmers in Wheat crop var. GW-273. Total seed production was approximately 504.22 qt.
2. Krishak Sangwari was organized in both the season Kharif and Rabi. During the session we conducted 53 training programmes in all 10 Blocks of district Bilaspur and Mungeli, in which 1956 farmers were benefited.
3. During the session 2012-13 related to KVK activities 160 news coverage through print and electronic media for mass dissemination of technology for farmers community.
4. During year KVK Bilaspur, scientist and adopted farmer is awarded and recognitions by different organization, KVK is awarded by Paryawaran Paryatan Vikas Society, Bilaspur for exhibition of different products i.e. Mushroom, Flower, Jam, Jelly, Vegetable etc. and also awarded 02 farmers of Dhooma Village by above mentioned society.
5. Mrs. Nivedita Pathak, PA (Home Science) has awarded by DDG for best Exhibit in Kisan Mela at New Delhi in National Global Conference.
6. Mr. Vinod Kumar Nirmalkar, SMS (Plant Pathology) has awarded for Mushroom Production awareness Programme.

7. Chief Editor of Haribhoomi is recognized the institute for their news coverage regarding technology dissemination.
8. NICRA village adapted farmer Shri Devnath Dewangan is awarded "Best Farmer " award under ATMA project 2012-13 by Hon'ble Agriculture Minister Chhattisgarh Government Ministry of Agriculture cash Rs. 25000/- and certificate.
9. KVK Bilaspur is cultivated four different species of Oyster Mushroom (i.e. *Pl. Florida*, *Pl. Ous*, *Pl. Hypsizygous*, *Pl. Sajar Kaju*) for demonstration of farmers. Mushroom cultivation technology awareness, is disseminated by training programme to rural youth, SHG farmers and farm women.

Summary of Major achievements

Activity	Target		Achievement	
	Number of activity	No. of farmers/ beneficiaries	Number of activity	No. of farmers/ beneficiaries
OFTs	**10**	**41**	**14**	**57**
FLDs – Oilseeds (activity in ha)	**10 ha**	**27**	**10.2 ha**	**27**
FLDs – Pulses (activity in ha)	**10 ha**	**55**	**20.60 ha**	**69**
FLDs – Other than Oilseed and pulse crops(activity in ha)			**12.40 ha**	**31**
Training-Farmers and farm women	**-**	**-**	**60**	**1069**
Training-Rural youths			**1**	**09**
Extension Activities			**653**	**2622**
Seed Production programme at farmers field	**-**	**-**	**20 ha**	**20**
Seedling Production (Number of activity as number of seedlings in numbers)	**-**	**-**	**500**	**13**
Live stock products			**10562.11**	**Amt 264054**
SAC Meeting (Date & no. of core/official members	**02**	**-**	**01 dt 27/05/2012**	**18**
Newsletters (no.)	**04**	**2000**	**04**	**2000**
Publication (Research papers, popular article)	**-**	**-**	**37**	**-**
Convergence programmes / Sponsored Programmes	**-**	**-**	**110**	**3296**
KVK-ATMA Linkage Programme (Number of activities)	**-**	**-**	**53**	**1956**
Outreach of KVK in the District (No. of blocks, no. of villages)	**-**	**-**	**10**	**1623**
KMA (No. of messages & beneficiaries)	**-**	**-**	**13**	**619**

KVK in News

दैनिक भास्कर
बिलासपुर, रविवार, 3 मार्च 2013
कृषि वैज्ञानिकों ने दिया किसानों को प्रशिक्षण

नवभारत 3 बिलासपुर, रविवार, 3 मार्च 2013
किसानों को मिट्टी परीक्षण कराने की सलाह

लोकस्वर
बिलासपुर, मंगलवार १२ फरवरी २०१३
गोंदईया पें किसान मेला

बिलासपुर, शनिवार 23 फरवरी 2013 | नईदुनिया | 15
सब्जी के बाद अब फूलों की करें खेती

कृषक दुनिया 2 जुलाई से 8 जुलाई 2012
पर्यावरण दिवस पर ग्राम घूमा में कृषक गोष्ठी सम्पन्न

हरिभूमि
बिलासपुर, सोमवार, 25 फरवरी 201
धूमा के कृषक फल-फूल की खेती में बने अग्रणी

दैनिक भास्कर
फल व सब्जी परिरक्षण पर दिया प्रशिक्षण

बिलासपुर, रविवार, 10 फरवरी 2013 www.navabharat.org | नवभारत
नई तकनीक से अच्छी पैदावार करें किसान: दीवान
गोंदईया में किसान मेला, कृषि प्रदर्शनी कार्यक्रम आयोजित

नईदुनिया
32 किसानों ने लिया प्रशिक्षण

पत्रिका
बिलासपुर . गुरुवार
18.10.2012
नवागढ़ में विश्व खाद्य दिवस मना
बिलासपुर कृषि विज्ञान केन्द्र बिलासपुर एवं कृषि विभाग के संयुक्त

हरिभूमि 13
बिलासपुर, शुक्रवार, 20 अप्रैल 2012
प्री जोनल वर्कशाप समाप्त

हरिभूमि
धान के उन्नत उत्पादन के लि

दैनिक भास्कर 18
मशरूम उत्पादन से अतिरिक्त आय संभव

पत्रिका बिलासपुर
13.03.2013
उन्नत कृषि तकनीक की दी जानकारी
कृषि विज्ञान केन्द्र ने दिया कृषक संगवारियों को प्रशिक्षण

दैनिक भास्कर
कृषि तकनीक का प्रशिक्षण

वैज्ञानिक सलाहकार समिति की बैठक संपन्न हुई

नवभारत 10 सितम्बर 2012
कृषक मित्रों के लिए समसामयिक प्रशिक्षण कार्यक्रम
कृषि विभाग द्वारा एक्सटेंशन रिफार्म्स आत्मा योजना

बिलासपुर. कृषि विभाग द्वारा एक्सटेंशन रिफार्म्स आत्मा योजना के अन्तर्गत जिले के विभिन्न विकास खण्ड के कृषकों (चयनित कृषक संगवारी) को समसामयिक कृषि तकनीक ज्ञान एवं कौशल परीक्षण हेतु कृषि विज्ञान केन्द्र द्वारा अलग-अलग तिथियों में 6 से 29 सितंबर तक एक दिवसीय प्रशिक्षण दिया जायेगा. परियोजना संचालक आत्मा उपसंचालक कृषि ने संयोजक बीटीटी एवं वरिष्ठ कृषि अधिकारियों से कहा है कि किसान संगवारियों को प्रशिक्षण स्थल तक पहुंचाने के लिए कृषि विकास अधिकारी या ग्रा. कृषि विकास अधिकारियों की ड्यूटी लगायें. जिससे उक्त प्रशिक्षण में शत्-प्रतिशत कृषकों की उपस्थिति दर्ज हो सके. प्रशिक्षण हेतु प्रस्तावित कार्यक्रम के अनुसार विकासखण्ड बिल्हा में 6 एवं 7 सितंबर को, मस्तूरी में 7, 8 एवं 10 सितंबर को, तखतपुर में 10 एवं 12 सितंबर को, कोटा में 13 एवं 17, पेण्ड्रा में 20, गौरेला में 20 सितंबर को, लोरमी में 20, 21, 22 एवं 24 सितंबर को, पथरिया में 24, 25 सितंबर को, मुंगेली में 26, 27 एवं 28 सितंबर को तथा मरवाही में 29 सितंबर को चयनित मित्र कृषकों को प्रशिक्षण दिया जायेगा.

नईदुनिया | बिलासपुर, मंगलवार 4 सितंबर 2012

सीखा जैम और जैली बनाना

बिलासपुर। बिल्हा विकासखंड के ग्राम परसदा में फल व सब्जी प्रसंस्करण पर दो दिवसीय प्रशिक्षण शिविर का आयोजन किया गया। इसमें स्व सहायता समूह की महिलाओं को प्रशिक्षित किया जा रहा है।

कार्यक्रम के मुख्य अतिथि कृषि महाविद्यालय एवं अनुसंधान केंद्र के अधिष्ठाता डा. सीआर गुप्ता थे। इस अवसर पर उद्यान वैज्ञानिक डा. संजय कुमार वर्मा ने प्रशिक्षण कार्यक्रम की जानकारी दी। शिविर के प्रथम दिवस महिलाओं को जैम, जैली, टमाटर सास बनाकर बताया गया।

डा. टीडी पांडेय ने फल एवं सब्जी की परिरक्षण के पहले उनका चयन श्रेणीकरण किस प्रकार किया जाना

फल-सब्जी का प्रशिक्षण लेते स्व-सहायता समूह के सदस्य।

प्रचार-प्रसार पर प्रकाश डाला। प्रशिक्षण कार्यक्रम से स्व

इवनिंग टाइम्स

बिलासपुर, सोमवार 11 फरवरी 2013 | 3

यौगिक खेती अपनाएं कृषक

गोंदईया में किसान मेला

नईदुनिया | बिलासपुर, मंगलवार 4 सितंबर 2012

धान की जगह लें गेंहू चना, सरसों की खेती

कृषि वैज्ञानिक ने दी ग्रामीणों को जानकारी

के लिए कृषकों को कहा। उन्होंने कहा रबि सीजन में धान नहीं लगाकर गेंहू,

16 | नईदुनिया | बिलासपुर, रविवार 10 फरवरी 2013

नवीन कृषि तकनीक को जाना

बिलासपुर। कृषि विज्ञान केंद्र ने शनिवार को बिल्हा अंतर्गत ग्राम गोदइया में अध्यक्ष छत्तीसगढ़ राज्य औद्योगिक

ग्राम गोदइया में किसान मेला

आरएन शर्मा ने किसानों को खेती में कृषि विज्ञान केंद्र के विशेषज्ञों से तकनीकी मार्गदर्शन लेकर फसल

पत्रिका | बिलासपुर . बुधवार | 13.03.2013 | बिलासपुर

उन्नत कृषि तकनीक की दी जानकारी

- कृषि विज्ञान केन्द्र ने दिया कृषक संगवारियों को प्रशिक्षण

बिलासपुर

हरित काई राईजोबियनम के

पत्रिका | बिलासपुर . शुक्रवार | 15.03.2013 | बिलासपुर

मशीनरी से आसान होती है खेती

- बिरगहनी में कृषक प्रशिक्षण

हरिभूमि | बिलासपुर, सोमवार, 18 मार्च 2013

कृषि यंत्रों का समझाया महत्व

दैनिक भास्कर | 14

कीटनाशक प्रयोग पर हुई कार्यशाला

हरिभूमि | बिलासपुर, शुक्रवार, 15 जून 2012

सुरक्षित अनाज भंडारण के उपायों पर जोर

बिलासपुर। कृषि विज्ञान केंद्र एवं कर्मदक्ष संस्था के संयुक्त तत्वावधान में 12 जून को कोटा विकासखण्ड के ग्राम बछालीखुर्द में फसलान्तर प्रौद्योगिकी पर प्रशिक्षण शिविर का आयोजन किया गया। इसमें उन्नत कृषि उत्पादन तथा फसल के सुरक्षित भंडारण पर जोर दिया गया। कृषि विज्ञान केंद्र बिलासपुर के कार्यक्रम समन्वयक ने बताया कि प्रशिक्षण में इंजी. उमेश कुमार ध्रुव ने फसल कटाई के लिए प्रयोग किए जाने वाले कृषि यंत्रों की कार्यक्षमता एवं उपयोगिता के बारे में विस्तार से बताया। केंद्र के प्रसार वैज्ञानिक डा. दिनेश कुमार शर्मा ने दैनिक उपयोग में आने वाली वस्तुएं जैसे अनाज, दलहन, तिलहन, फल एवं सब्जियों के उचित भंडारण के लिए अच्छी तरह अनाजों को सुखने की बात कही तथा अनाज को भंडारण के लिए पूसा बिन कोठियों का उपयोग करने की सलाह दी। जिससे कीड़े-बीमारियों एवं नमी से लगभग 30 प्रतिशत अनाज को हानि से बचाया जा सके। उन्होंने अनाज भंडारण के लिए रासायनिक दवाओं के उपयोग एवं सावधानी रखने की जानकारी दी। कार्यक्रम समन्वयक डा. आरएन शर्मा ने किसानों को द्विफसली रकबा बढ़ाने, खेती में नमी संरक्षित कर... कम अवधि की फसल लगाने एवं... बचाकर रखने के लिए सामूहिक रू... करने एवं रबी फसलों का क्षेत्र बढ़... फसल चक्र अपनाकर मक्का फसल के उत्पादन... उन्नति करने के लिए तकनीकी जानकारी प्रदान... अवसर पर कार्यक्रम के अध्यक्ष दीपनारायण बनर्जी... सुरक्षित अनाज भंडारण के उपाय बताए।

हरिभूमि | बिलासपुर, सोमवार, 25 फरवरी 2013

घूमा के कृषक फल-फूल की खेती में बनें अग्रणी

दैनिक भास्कर | 18

फल व सब्जी परिरक्षण पर दिया प्रशिक्षण

2 अप्रैल से 8 अप्रैल 2012 | कृषक दुनिया

खरगहना में कृषि मशीनरी पर कृषकों को प्रशिक्षण

नईदुनिया | बिलासपुर, बुधवार 13 जून 2012

32 किसानों ने लिया प्रशिक्षण

नईदुनिया | बिलासपुर, शुक्रवार 15 जून 2012

50 किसानों ने लिया फसलांतर का प्रशिक्षण

बिलासपुर। कृषि विज्ञान केंद्र एवं कर्मदक्ष संस्था के संयुक्त तत्वावधान में ग्राम बछालीखुर्द में 50 किसानों को फसलांतर प्रौद्योगिकी पर प्रशिक्षण दिया गया। इंजीनियर उमेश कुमार ध्रुव ने फसल कटाई के लिए प्रयोग किए जाने वाले कृषि यंत्रों की उपयोगिता व कार्यक्षमता के बारे में जानकारी दी। प्रसार वैज्ञानिक दिनेश कुमार शर्मा ने दैनिक उपयोग में आने वाली वस्तुएं जैसे अनाज, दलहन, तिलहन, फल एवं सब्जियों के उचित भंडारण के लिए अच्छी तरह से अनाजों को सुखाने की बात कही तथा अनाज के भंडारण के लिए पूसा बिन कोठियों का उपयोग करने की सलाह दी ताकि कीड़े, नमी व बीमारियों से होने वाले करीब 30 फीसदी अनाज को हानि से बचाया जा सके। कार्यक्रम समन्वयक डॉ. आरएन शर्मा ने किसानों को द्विफसली रकबा बढ़ाने, खेतों में नमी संरक्षित करने के लिए कम अवधि की फसल लगाने एवं फसलों को बचाकर रखने के लिए सामूहिक रूप से खेती करने, रबी फसलों का क्षेत्र बढ़ाने के साथ फसल चक्र अपनाकर मक्का फसल के उत्पादन से आर्थिक उन्नति करने के लिए तकनीकी जानकारी दी। इस दौरान कर्मदक्ष संस्था के लोकपाल, रवि यादव व कृषक क्लब के अध्यक्ष संतोष राज, गोपाल सिंह, महिला कृषक श्रीमती रामकली गोंड सहित 50 कृषकों ने प्रशिक्षण लिया। इस अवसर पर कार्यक्रम के अध्यक्ष दीप नारायण बनर्जी ने महिला समूहों व कृषक क्लब के सदस्यों को कृषि विज्ञान केंद्र द्वारा बताई गई उन्नत कृषि

नईदुनिया | बिलासपुर, रविवार 10 फरवरी 2013

मशरुम उत्पादन से होगा आर्थिक विकास

पत्रिका | 16.02.2013

जागरुकता प्रशिक्षण कार्यक्रम संपन्न

लोकस्वर | बिलासपुर, मंगलवार 12 फरवरी 2013

गोंदईया में किसान मेला

दो जवानों में मारपीट