

## ANNUAL REPORT OF COLLEGE 2012-13



## RAK COLLEGE OF AGRICULTURE, SEHORE, M.P.



## RAJMATA VIJAYARAJE SCHINDIA KRISHI VISHWA VIDYALAYA

# **ANNUAL REPORT OF COLLEGE 2012-13**

## **RAK COLLEGE OF AGRICULTURE, SEHORE, M.P.**

### **1. Introduction:**

Agriculture plays a vital role in Indian economy. The state of Madhya Pradesh recorded the highest agricultural growth rate of around 18% in the country. In order to sustain this agricultural growth, there is need to produce qualified and trained youth having graduate and post graduate degree in agriculture. This college is actively engaged in achieving this goal since after independence. Beside it is actively involved in developing the crop production technologies and its translation at the level of ultimate users in order to boost the production and productivity in sustainable manner. The salient achievements made during the year 2012-13 are mentioned below:

### **2. Academic Highlights:**

#### **2.1. Profile of the College:**

The foundation of College of Agriculture, Sehore was laid down by the first Food and Agriculture Minister of India, Late Shri Rafi Ahmad Kidwai on 01<sup>st</sup> August, 1952. This college originally named as Agriculture Institute was established. At that time, this college was up to intermediate level and the college was affiliated with the Agra University, Agra. On 17<sup>th</sup> July, 1955, Union Minister for Food and Agriculture, Shri Ajit Prasad Jain laid foundation of Rafi Ahmad Kidwai Undergraduate College and Agricultural Research Institute and the college was affiliated with Vikram University, Ujjain. In the year 1964, after establishment of Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, this college was one of the constituent colleges of JNKVV, Jabalpur. On 19<sup>th</sup> August, 2008 a new agricultural university- Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya was established by the bifurcation of JNKVV with head quarter at Gwalior and this college is under administrative control of RVSKVV, Gwalior. This college is situated in semi urban area of Sehore town, 40 Km away from the state capital Bhopal and 150 Km away from Indore. Sehore is situated at a latitude of 23.06° N, the longitude of 77.05° E and at an altitude of 498.77 m above mean sea level. The college caters the needs of the Vindhyan Plateau Agro Climatic Zone of Madhya Pradesh. The college has co-education system. The college offers undergraduate degree program along with post graduate programs in 8 disciplines of agriculture (Agronomy, Genetics & Plant Breeding, Horticulture, Agril. Economics, Extension Education, Entomology, Soil Science and Plant pathology). The college is sprawled over 350 acres of land with scientific seed production and seed processing facilities. The college is equipped with

Agricultural Research Information System (ARIS) Cell with unlimited access to all the departments of PG studies.

### 2.1.1. Detail of the college:

The RAK College of Agriculture, Sehore is located on Bhopal - Indore state high way on the outer site of Sehore towards Indore. This college is divided in three portions; one side is situated at jangalihata on the old Indore-Sehore road and other two portions on both sides of Sehore -Ichhawar road. The portion situated on eastern side of the road was established in 1952 and the portion situated on the western side of road was established in 1958. Total college area is 142.9 ha and out of which the cultivated area is 90.70 ha, and plantation of horticultural plants 12.0 ha. The remaining area is under buildings, roads, playing grounds, etc.

#### LAND USE

(in ha)

Total area	Road & Building	Fallow	Pasture	Plantation			Cultivated area			
				Fruit	Forest	Total	Irri.	P.irri	Raifed	Total
142.9	47.38	-	1.82	2.00	12.00	14.00	-	18.00	72.70	90.70

RAK College of Agriculture, Sehore farm is mainly grown seed production programmes as well as instructional materials. Primary objective of this farm is to produce quality seed of improved varieties of various crops grown in the region like soybean, gram, wheat, lentil etc and to make seed available to seed producing agencies of the state. Improved production technology of various crops is also demonstrated to farmers, students and extension workers.

During Kharif 2012 out of 90.70 ha cultivated area 81.40 ha was covered under seed production, 8.10 ha. area was under research projects and 1.20 ha under dairy, approximate 12.00 ha waste land under horticulture plantation. In rabi seasons 2012-2013 out of 90.70 ha cultivated area, 48.10 ha area was covered under seed production by the farm

#### UTILIZATION OF CULTIVATED LAND DURING THE YEAR 2012-13

(Area in ha)

Particulars	Seasons				Cultivated area (ha.)	Cropping intensity (%)
	Kharif	Rabi	Zaid	Total cropped area		
Research	8.10	10.00	-	18.10	10.00	-
Dairy & Orchard	1.20	1.50	-	2.70	2.70	-
Seed Production,	81.40	48.00	-	129.40	78.00	163 %
<b>Total</b>	<b>90.70</b>	<b>59.50</b>	-	<b>150.20</b>	<b>90.70</b>	<b>163 %</b>

## 2.2. Admission Procedure:

### 2.2.1. Under Graduate Programmes:

The students seeking admission in UG programme have to pass the entrance examination conducted by "VYAPAM" or by the ICAR at national level. After counseling at university level or ICAR level are admitted in the college.

### 2.2.2. Post Graduate Programmes:

According to merit at graduate level and counseling at V.V. level.

### 2.2.3. Ph.D. Programmes: Nil

## 2.3. Allocation of seats and roster:

### 2.3.1 Intake Capacity at a Glance:

Under Graduate: B.Sc. (Ag.): 60 + 12% from ICAR quota + 12% as payment seat.

Post Graduate: M.Sc. (Ag.): 4 seats [free] + 4 [payment] in each department

Ph.D. Agriculture: Nil

### 2.3.2 Under Graduate B.Sc. (Ag.): 60 + 12% from ICAR quota + 12% as payment seat.

Allocation of seats		UG Programme 2012-13		
Roster		Male	Female	Total
Free seats	Gen.	02	03	05
	ST	12	03	15
	SC	10	05	15
	OBC	23	09	32
Payment		10	03	13
NRI Seats		00	00	00
Nominee/ Fellow	ICAR	03	01	04
Total		60	24	84

**2.3.3 Post Graduate M.Sc. (Ag.): 4 seats [free] + 4 [payment] in each department**

S. No	Dept.	Allocation												G.Total
		Gen.		OBC		SC		ST		ICAR	Payment seats			
		P	F	P	F	P	F	P	F		NRI	Nominee / Fellow		
1.	Agronomy	02	02	00	01	01	00	01	01	00	00	00	08	
2.	Agril. Eco.& FM	02	02	00	01	01	00	01	01	00	00	00	08	
3.	Entomology	02	02	00	01	01	00	01	01	01	00	00	09	
4.	Extn. Education	02	02	00	01	01	00	01	01	00	00	00	08	
5.	Horticulture	02	02	01	00	00	01	01	01	00	00	00	08	
6.	Plant Breeding & Genetics	02	02	00	01	01	00	01	01	01	00	00	09	
7.	Plant Pathology	02	01	00	01	01	00	01	01	00	00	00	06	
8.	Soil science & Agril. Chemistry	02	02	00	01	00	00	02	01	00	00	00	08	
	Total	16	15	01	07	5	1	9	8	02	00	00	64	

**2.3.4. Ph.D. Agriculture: Nil**

**2.3.5. Ph.D. Horticulture: Nil**

**2.4. Student Strength:**

**2.4.1. Students Admitted:** UG = 86; PG= 66

**2.4.2. Student Strength at a Glance:** Total UG = 360 [Girls = 30%]; Total PG= 145 [Girls= 25%]

**2.4.3. Category wise Strength:** UG= 360 [Gen= 75; SC= 65; ST= 76; OBC= 144]

Name of campus	General		SC		ST		OBC		Total		G.Total
	B	G	B	G	B	G	B	G	B	G	
Sehore	50	25	41	24	59	17	103	41	252	108	360

**2.4.4. Post Graduate M.Sc. (Ag.):** PG= 145 [Gen=26; SC= 27; ST= 37; OBC= 55]

	Department	Sehore		Total
		Boy	Girls	
1	Agronomy	08	10	18
2	Ag. Eco.& FM	13	04	17
3	Entomology	16	01	17
4	Ext.Edu.	10	07	17
5	Horticulture	15	01	16
6	Plant Breeding & Genetics	20	00	20
7	Plant Pathology	06	03	09
8	Soil Science & Ag. Chemistry	06	02	08
	Total	94	28	122

**2.4.5. Ph.D. Agriculture/ Horticulture:** Nil**2.5. Teaching Status:****2.5.1. Under graduate:**

B.Sc. (Agril.)	Course offered (No.)		Total Credits	
	I Sem.	II Sem.	I Sem.	II Sem.
1 <sup>st</sup> year	8	9	21	22
2 <sup>nd</sup> year	9	8	23	20
3 <sup>rd</sup> year	8	9	20	20
4 <sup>th</sup> year	5	7	20	20
Total	30	33	84	82

**2.5.2. Post Graduate M.Sc. (Agril.):**

S. No.	Department	Course offered (No.)				Total Credits			
		I Sem.		II Sem.		I Sem.		II Sem.	
		Pre.	Final	Pre.	Final	Pre.	Final	Pre.	Final
1.	Agronomy	09		09		21		20	
2.	Ag. Eco.& FM	10		09		20		20	
3.	Entomology	10		10		21		20	
4.	Ext.Edu.	10		10		21		18	
5.	Horticulture	09		09		19		20	
6.	Plant Breeding & Genetics	09		10		21		19	
7.	Plant Pathology	10		09		21		20	
8.	Soil Science & Agril. Chemistry	09		09		22		20	
	Total	76		75		166		157	

**2.5.3.Ph.D. Agriculture/ Horticulture:** Nil

**2.5.4 Ph.D. Horticulture:** Nil

**2.6 Thesis Submitted to Faculty of Post Graduate 2012-13:** 15

**2.7 Experiential Learning Programme:**

The programme to the final year UG students is being run as per the norms of ICAR and University.

Crop production module:31 students

Horticulture module: 31 students.

Plant protection module: 30 students

## 2.8 Rural Agriculture /Horticulture Work Experience

Rural agricultural awareness work experience (RAWWE) is targeted for imparting hands on practical training to the undergraduates for bringing high quality skills and practical work experience is based on the principal of “Learning by doing and seeing is believing” In this programme, the B.Sc.(Ag.) IV<sup>th</sup> year students are placed in rural environment from where they will be able to gain the practical knowledge and skill of Agriculture Technology.

Period	No. of Students	Name of village adopted	Technologies Disseminated among farmers (Significant heads)
2012-13	93		Soil testing
	35 Boys at KVK, Rajgarh:	Dola, Pankhadi&Khurc hiyakala	Soil Treatment Fertilizer application Organic farming
	37 Boys at KVK, Shajapur:	Bapcha&Bhalukh edi	Identification of weeds Weed control
	21 Girls at KVK, Dewas:	Narana	Efficient use of appropriate insecticides & pesticides Inter cropping Improved seeds Seed treatments Irrigation Water management Post harvest technologies Management of Orchards Nursery management Fruit' flowers & vegetable cultivation, Grading & marketing Storage Preparation of soya milk Income generation activities/



			<p>programme</p> <p>Various developmental programmes in rural areas</p> <p>Allovera (ग्वारपाटा) Juice preparation</p> <p>Biodiversity nursery visits</p> <p>Medicinal plants identification</p> <p>Mushroom cultivation.</p> <p>Post harvest technologies,</p> <p>Animal husbandry</p> <p>House hold technologies (Water purification, Fruits and vegetables preservation, nutrition management, balance diet, sanitation)</p>
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## 2.9 Academic Excellence:

**2.9.1 Students Secured Rank in ICAR JRF Examination:** Four students have been selected.

**2.9.2 UG Gold Medals:** Nil

**2.9.3 PG Gold Medals:** Nil

**2.9.4 No. of Degree Conferred on the eve of 1<sup>st</sup> Convocation of university held on 21<sup>st</sup> July 2012:** 10

### 2.9.5 Scholarship and Stipends:

Scholarships to SC and ST students are being given to the students through M.P. Govt. Stipend is being distributed the RAWE students as per V.V. norms.

## 3. Students Welfare Activities:

The activities of placements cell are being carried out and classes on personality development and student counseling have been arranged for the benefit of the students.

### 3.1. National Service Scheme (NSS):

The National Service Scheme (NSS) is a voluntary organization which provides social awareness toward social works in rural and urban people. NSS was started by Govt. of India in 1969. One unit is active in college through Barkatullah University, Bhopal. NSS conducts two types of activities in colleges,

Regular & Special camp.Regular activity includes NSS Day celebration, Plantation, Blood donation, NashaMukti programme, voter ID awareness, malnutrition day (KuposhanDiwas), Pals polio Abhiyan, AIDS awareness, BetiBachaoabhiyan, Energy Save, gazarGhass eradiation and Red Ribbon Club Activities, etc., Special Camps conduct by College unit include seven days camp in rural areas and work done by volunteers like social work, awareness march and nukkadnataks

#### **CAMP ATTENDED BY THE VOLENTEERS**

<b>Name of Camp</b>	<b>Venue</b>	<b>Duration</b>	<b>No. of Volunteers</b>
Unit Camp	Rafikganjdist. Sehore		55
University Level Camp	Pachmarhi (Hosangabad)	21.03.12- 27.03.12	04
State Level Camp	Rajgard (MP)	24.01.13-02.03.13	02

Number of volunteers appeared in 'B' and 'C' certificate exams.

<b>Duration</b>	<b>"B" Certificate</b>	<b>"C" Certificate</b>
2012-13	62	06

#### **VOLENTEERS WHO RECEIVE PRIZE FOR THEIR BEST PERFORMANCE:**

<b>Name of Student</b>	<b>Event</b>	<b>Position at Univ. level</b>
Prasan Kumar	Poster(malnutrition day)	2 <sup>nd</sup>
Ku. Surbhi Sharma	Speech Competition(malnutrition day)	3 <sup>rd</sup>











### 3.2. National Cadets Cores (NCC):

#### CAMP ATTENDED BY THE CADETS

Name of Camp attended	Venue		No. of cadet
CATC	Bhopal(M.P.)	13.09.12 -22.09.12	25
		07.08.02 - 16.08.12	10
IGC Camp	Bhopal(M.P.)	17.10.12- 26.10.12	16
DCAT Camp	Raipur(C.G.)	01.11.12. - 10.11.12	01

#### NUMBER OF CADETS APPEARED IN THE "B" & "C" CERTIFICATE EXAM

Duration	"B" Certificate	"C" Certificate
2012-13	34	14

### CADETS WHO RECIVED PRIZE FOR THERE BEST PERFORMANCE

Name of Cadet	Event
Dinesh Pawar	100m Race
HirdeshVerma	Cross country race
SaketSoni	music
Gaurishankarmeena	Quize

### ACTIVITIES IN WHICH CADETS PARTICIPATED:

1. Pusle Polio Abhiyan
2. Blood Donation
3. Plantation
4. Firing competition
5. Sports
6. Cultural events



Participation in Parasailing by cadet in DCAT Bhilai (C.G.)



## SPECIAL ACHIEVEMENTS DURING 2012-13



Dr.V.S.Gautam Dean RAK COA ,MrsGautam,Dr.A.N.Tikle, Lt.M.L.Jadav and cadets with fist place winning trophy.



एन.सी.सी दिवस 2012 के अवसर पर आर.ए.के.कृषि महाविद्यालय सीहोर के ए.एन.ओ.लेफ्टिनेंट एम.एल.जादव को उत्कृष्ट कार्य के लिए सम्मानित करते हुए ए.डी.जी.(म.प्र.व छ.ग.) मेजर जनरल सी.के.बजाज एवं ग्रुप कमांडर बी.एन.सिंह





NCC OFFICER Lt.M.L.JADAV AND CADETS WITH FIRST PLACE WINNING TROPHY INFONT OF THE COLLEGE

## एनसीसी दल को प्रथम स्थान

सीहोर (आरएनएन)। 64वें गणतंत्र दिवस के अवसर पर चर्च ग्राउण्ड पर आयोजित मुख्य समारोह की परेड में आरएके कृषि महाविद्यालय के एनसीसी दल को प्रथम स्थान प्राप्त हुआ।

समारोह के मुख्य अतिथि एवं जिले के प्रभारी मंत्री कुवर विजय शाह ने एनसीसी आफिसर लेफ्टिनेंट एमएल जादव एवं अंडर ऑफिसर हिदेश कुमार वर्मा को प्रथम विजेता ट्राफी प्रदान की। कृषि

महाविद्यालय के एनसीसी दल की उपलब्धि पर अधिष्ठाता डॉ व्हीएस गौतम एवं 4 एमपी बटालियन के कमान अधिकारी कर्नल रूपेन्द्र सिंह ने बधाई व शुभकामनाएं दी हैं। कई वर्षों के बाद प्राप्त उपलब्धि पर डॉ. एसबी ताम्बी, डॉ एसएन सोनी, डॉ. एसआर रामगिरी, डॉ एएन टिकले, इंजी. एसएस कुशवाह, डॉ रूपेन्द्र खंडवे, डॉ. संदीप शर्मा, डॉ एमएस परिहार, डॉ. आरपी सिंह, रैदास ने हर्ष व्यक्त किया है।



गणतंत्र दिवस मुख्य समारोह (२०१३), चर्च ग्राऊण्ड सीहोर, प्रभारी मंत्री कुवर विजय शाह से प्रथम विजेता ट्राफी प्राप्त करते हुए आर.ए.के.कृषि महाविद्यालय के एन.सी.सी. अधिकारी लेफिट. एम.एल.जादव एवं अण्डर आफिसर हिरदेश कुमार वर्मा ।



### 3.3 Students Counseling and Placement Cell:

#### Student Counseling:

#### Placement Cell 2012-13

Students of CoA,Sehore placed in various Govt.Organization and Pvt. Limited Companies during the current year 2012-13. The details are given below.

S.No.	Name of Students	Status	Organization
1.	ArvindJharkhende	Govt.as Coordinator	Integrated Watershed Mission Ministry of Rural Development &Panchyat, M.P. Govt.
2.	Tikam Chand Rathore	Pvt. Ltd as Agril Representative	Chambal Fertilizer Pvt. Ltd.
3.	YogeshYadav	Pvt. Ltd as Sales Officer	Shri Ram Bio Sedds Pvt. Ltd.
4.	Rahul Gowshinde	Pvt. Ltd as Sales Officer	Shri Ram Bio Sedds Pvt. Ltd.
5.	KamleshLowanshi	Pvt. Ltd as Sales Officer	Shri Ram Bio Seeds Pvt. Ltd.
6.	SubhashPatidar	Pvt. Ltd as Sales Officer	Shri Ram Bio Sedds Pvt. Ltd.
7.	LokeshYadav	Pvt. Ltd as Agril Representative	BASF Pvt. Ltd

### 3.4 Cultural and Sports Activities:

#### Cultural Unit 2012-13

Student of COA Sehore activity participated in cultural activities at College level District level,RVSKVV youth festival as well as in interuniversity competition during 2012-13 the detail are given below

S.No.	Activities	Name of Students	Remark /Position
1.	Inter-University Elocution Competition inter-collegiate level	Ku.Surbhi Sharma Nimisha Raj Jain	Participated 2 <sup>nd</sup> position Participated
2.	District Youth Festival 2012	SudhirRai Ku. Surbhi Sharma	Participated and 2 <sup>nd</sup> position
3.	Quiz	SudhirRai	Winner

		Nitin Rajput	
4.	Skit	Nitin Rajput and other	Runner
5.	Indian Folk Group Song	Ku. Shyamla Joshi and other	Runner
6.	Rangoli	Ku. Surbhi Sharma	Runner
7.	On the spot painting	Lokendra Rajput	Runner





## **Sports**

Four players were selected in university team

1. Badminton, Carrom, T.T. AND Chess intercollegiate tournament held at Indore 04 to 06 October 2012 Sehore team has participated in all events.

### **Players selected in university**

- MukeshJamra **M.Sc.** (Ag) (Volley ball)
- NitinRajpur 2<sup>nd</sup> year (Khokh)
- PrdeepGiri (Volley ball)
- PrakashBrahmne (Khokh)

## **Athletics**

### **Male**

Kabaddi and Athletics tournament held at Gwaliior from 14-16 Feb, 2013

1. 1500 m race 3<sup>rd</sup> Umesh Muwel
2. 200 m race 3<sup>rd</sup> Vijendra Jaisval
3. 100 m race 2<sup>nd</sup> Dinesh Pawar
4. 400 XI Relay race 3<sup>rd</sup> (MahadevYadav , Dinesh Pawar, Bharat Meena , Devendra )
5. High jump 3<sup>rd</sup> Dinesh pawar

#### 4. Research Highlights

##### 4.1. List of All India Coordinated Research Projects:

All India Coordinated Research Project on Soybean (ICAR)  
All India Coordinated Research Project on Chickpea (ICAR)  
All India Coordinated Research Project on Pigeonpea (ICAR)

##### **State plan projects:**

National Agriculture Research Project Phase I & II (State Plan)  
Intensive Extension Research Project (State Plan)  
Intensive Extension Research Project (State Tribal Sub Plan)

##### **Research projects National funding**

Hybrid Seed Production of Pigeonpea hybrids and Development of CMS lines of better agronomic architecture (RKVY)

Validation of technology for replacement of double dollar chickpea in M P (RKVY)

Bee Keeping (RKVY) Fruit Research Station, Entkhedi

Organic farming (RKVY) College of agriculture, Sehore

##### 4.2. List of running Ad-hoc Projects (2012-13):

##### **Collaborative projects with national industries:**

Evaluation of Metaflumizone 22 % SC (Verismo 22% SC) for letridoptean pest of soybean

Efficacy of Flubendamide against Defoliators of soybean

Efficacy of Thicloprid 240 SC against Gardle beetle of soybean

Efficacy of Imidachloprid 600 FS (W/W) on soybean

Evaluation of bio-efficacy of Emameetin benzoate 5% WG soybean insect

Efficacy of HW 86% against soybean pests

Evaluation of Odyssey 70% WG against weeds in soybean

Evaluation of Banta zone Na Salt AS Basagram 44% against weeds in soybean

To judge the efficacy Biozyme soya plus granules and liquid on soybean

Evaluation of Fusiflax 25% EC for total weeds control in soybean

Clomozone (FMS) 50 EC weed control bio-efficacy studies in soybean

Suljentraxone 48% F - weed control bio-efficacy studies in soybean

Efficacy of HGW 86- 10 % OD (W/V) against insect pest of soybean. EI Dupont India Pvt.Ltd.

Evaluation of Bio-efficacy of Emamectin Benzoate UV RRR 5% WG against soybean insect pests.

Syngenta Pvt. Ltd.

Evaluation of fluazilop-p butye 12.5 + Fomesazen 12.5 % (furiflex 25% SL) for total weed control

in soybean and ettatonsuccediy crop chickpea. Syngenta

Evaluation of Bentazone Na salt 48% SL (Barcydon 48% W/V SL) against weed in soybean and

efful or succeeding crop chickpea. BASF

Evaluate bio efficacy data generation for Imazethopyr 10 % SL in soybean. Agrogill

Evaluation of clomazone 50 EC for control of weeds in soybean. FMC

Evaluation of sultentrozene 48% F for control of weeds in soybean. FMC

Evaluation of FMC herbicides ( F7121 and F 8032) in soybean. FMC

Evaluation of microbial inoculants Bio-mix in Chickpea sponsored project/ trial- Care Pro Bio Science Pvt. Ltd.

Studies on micronutrient crop response in different soil types and agro climatic conditions. RKVY Project Location \Sehore, Indore, Gwalior project out lay: 104 Lakhs

Management of soil Health and Degraded lands for Sustainable Agriculture under – Niche Area of excellence (NAE) ICAR- Funded CC CO

#### **In Collaboration with International Institutes/Agencies**

Mapping and validation of QTL's associated with drought traits in Chickpea-ICRISAT Basic Research to Enable Agriculture Development): "Overcoming the domestication bottleneck for symbiotic nitrogen fixation in legumes' –University of California USA and ICRISAT

Inspiring farmers Livelihood and food security through enhance legume productivity in India-IFAD through ICRISAT

"Breeding yield barriers in Lentil through introduction of useful genes from unadopted land races and wild gene pool"- ICARDA

Project for maximization of soybean production in Madhya Pradesh – JICA

Breaking yield barriers in Lentil through interrogation of un adopted land race and wild gene pool.

(DAC-ICARDA-ICAR Ad-hoc Project)

#### **4.3. New Varieties Developed and released:**

Sven varieties of different crops were approved by State variety Release Committee

Soybean: RVS 2001-04

Chickpea: RVG 101, RVG 202, RVG 203

Pigeon pea: RVSA-28, RVICPH 7126

Lentil: RVL 31

#### **4.4. Technologies Generated:**

##### **Agronomy**

##### **Soybean**

- ❖ In the *in situ* moisture conservation experiment variety JS 335 has responded better over JS 93-05 and NRC 7 for the conservation of moisture.
- ❖ In weed management, 2 HW, recorded higher yield followed by pre emergence application of Diclosulum 26 g/ha and Halaxyfop ethyl 100 g/ha as PoE.



- ❖ Application of salicylic acid @ 50 ppm recorded higher grain yield (2277 kg/ha) with higher net return, followed by application of Etherel @ 200 ppm of (2260 kg/ha) with higher BC ratio.
- ❖ Basal application of 30 kg S/ha and 0.5 Kg boron as borax gave an additional yield of 317 kg/ha (17% higher) and 122 kg/ha (6% higher) and net return of Rs. 4734/ha and Rs. 1241/ha, respectively over control (RDF only).

### **Entomology**

- Seed treatment with thiamethoxam 70 WS @ 3 g/kg seed was found effective against blue beetle and stem fly having longer residual effect up to -40 days of crop, giving 1222 kg/ha grain yield as against 908 kg/ha in control
- Ecofriendly insecticides (Chitin inhibitors) namely Lufenuron 5 EC @ 400 ml/ha and Diflubenzuron 25 WP @ 300 g/ha. were found equally effective to that of Chloropyriphos 20EC @ 1.5 l/ha for the control of green and grey semiloopers. Maximum yield of 1550 kg/ha was obtained in treatment of Diflubenzuron as against 1140 kg/ha in control.
- For the control of green and grey semi-loopers new molecules  $\lambda$  Cyhalothrin (New generation pyrethroid) 5 EC @ 300 ml/ha was found effective giving 19.25 %
- higher yield & 14.7 % ICBR. Indoxcarb (Oxadiazine group) 15 EC @ 300 ml/ha was found effective giving 14.25 % higher yield & 6.25 % ICBR over control.
- Profenophos 50 EC @ 1.25 l/ha was found effective against semiloopers and girdle beetle giving 13.70 % more yield & 7.40 % ICBR
- For the management of major insect-pests, IPM module involving seed treatment with Thiamethoxam 70 WS @ 3 g/kg seed, Installation of bird perch @ 50/ha., removal of girdle beetle infested/plant parts, foliar application of NSKE @ 5 % or Bt @ 1.0kg/ha at flowering. and need based application of Quinalphos 25EC @ 1.5 l/ha was found effective and recorded 6.5q /ha more yield than Non-IPM plot with a net profit of Rs.5842/ha.

### **PIGEONPEA**

#### **Plant Breeding**

Genotypes JSA 59 and JSA 41 of Sehore centre were found to have drought tolerance in central zone

**Plant Pathology** Seed soaking in mixture of cow urine (1:10)+ Asafoetida (0.01%) for 1 minute, followed by two sprays of cow urine (1:10) at 30 and 45 days after sowing is effective for the management of myrothecium leaf spot as well as bacterial pustules.

Survey of chickpea drying in Malva Plateau of Madhya Pradesh in collaboration with IIPR, Kanpur revealed incidence of Dry Root Rot upto 10 % in rainfed *desi* chickpea, Wilt incidences upto 25 % was observed in *kabuli* chickpea.

Presence of 4 variants in wilt pathogen of lentil *Fusariumoxysporumf. sp. lentis* from Madhya Pradesh, Chattishgarh, Rajasthan and Jharkhand was observed.

## MULLaRP

### Agronomy

1. Application of recommended dose of fertilizer (20:17:20 NPKS/ ha) along with FYM 5 t/ ha recorded maximum seed yield of 927 kg/ ha followed by recommended dose of fertilizers along with vermicompost -@ t/ ha (901 kg/ ha).
2. Urid bean genotypes RBU 38 gave higher yield under inter cropping system with sorghum in 1:1 row proportion giving urdbean equivalent yield (1870 kg/ ha)

### 5. Extension Highlights:

#### 5.1.Services Provided:

#### 5.2.

#### 5.3.Front Line Demonstrations

Activity	Target		Achievement	
	Number of activity taken	Number of farmers/ beneficiaries	Number of activity	Number of farmers/ beneficiaries
OFTs	9	45	9	45
FLDs – Oilseeds (activity in ha)	5	13	5	13
FLDs – Pulses(activity in ha)	10	25	10	26
FLDs - Cotton(activity in ha)	-	-	-	-
FLDs – Other than Oilseed and pulse(activity in ha/ unit if taken in Enterprise)	14.35	52	14.35	52

#### 5.4. Trainings

<b>Trainings</b> (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit; Number of activity is number of training)				
1. Training-Farmers and farm women	<b>80</b>	<b>2000</b>	<b>80</b>	<b>1918</b>
2. Training-Rural youths	<b>5</b>	<b>125</b>	<b>5</b>	<b>123</b>
3. Training- Extension functionaries	<b>5</b>	<b>125</b>	<b>5</b>	<b>155</b>



30 Women Farmers groups (ATMA) from Khandwa district of Madhya Pradesh visited the Research trials, Improve varieties of Gram, and Farm fields (08.02.13)





## 5.5. Farmers Fair / Kisan Divas /Kisan Visits

### Farmer's Group Visit

25 Farmers groups (ATMA) from Sehore districts of Madhya Pradesh visited the Research trials and FarmFields (11-12.09.12)

20 Farmers groups (ATMA) from Bhopal district of Madhya Pradesh visited the Research trials and Farm Fields (14.09.12)

50 Farmers groups (NHM) from Rajsmand districts of the Rajsthan states visited the Soybean field and trial of Horticulture & Vegetable crops production. (26.09.12)

40 Farmers groups (NHM) from Rajsmand districts of the Rajsthan states visited the Horticulture and Vegetable crops production trials. (03.10.12)

40 SC Farmers groups from Indore districts of Madhya Pradesh visited the different Research fields and Farm fields (26.12.12)

30 Farmers groups from Ujjain district of the Madhya Pradesh states visited the different Research fields, Agro-met Lab and Farm fields (27.12.12)

30 Farmers groups from Burahanpur districts of Madhya Pradesh states visited the Horticulture and Vegetable crops production trials and Farm fields (27.12.12)

30 Farmers groups from Vidisha district of Madhya Pradesh states visited the trials of Horticulture and Vegetable crops production and Farm fields. (29.12.12)

30 Farmers groups (ATMA) from Barvani districts of Madhya Pradesh states visited the Research trials and Ammonium Molybdenum application and their advantage in crop production and Farm fields

(11.01.13)

30 Farmers groups from Vidisha district of Madhya Pradesh states visited the trials of Horticulture & Vegetable and Chickpea crops production Technology and Farm fields (12.01.13)

30 Farmers groups (ATMA) from Chichoda, Guna district of the Madhya Pradesh states visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (13.01.13)

28 Farmers groups (ATMA) from Khargone district of Madhya Pradesh visited the Research trials Improved Varieties of Gram, Lentil and their production technique and Farm fields (19.01.13)

25 Farmers groups (ATMA) from Sonkaccha, Dewas district of Madhya Pradesh visited the Research Trials on Improve varieties of Gram and Farm fields (28.01.13)

30 Farmers groups (ATMA) from Begamganj, Raisen district of Madhya Pradesh visited the Research trials Improve varieties of Gram, seed production techniques and Farm fields (29.01.13)

40 Farmers groups (ATMA, NGOS, Satapura) from Sehore district of Madhya Pradesh states visited the Research trials Improve varieties of Gram and Farm fields (29.01.13)

30 Farmers groups (ATMA) from Dewas district of Madhya Pradesh states visited the Research trials on INM, Horticulture & Vegetable crops production and Farm fields (04.02.13)

30 Women Farmers groups (ATMA) from Khandwa district of Madhya Pradesh visited the Research trials, Improve varieties of Gram, and Farm fields (08.02.13)

30 Farmers groups (ATMA) from Khargone districts of Madhya Pradesh visited the Research trials Improve varieties of Gram and production technique, Ammonium Molybdenum Application and their advantage in crop production and Farm Fields (12.02.13)

25 Farmers groups (ATMA) from Tarana, Ujjain district of Madhya Pradesh visited the Research trials Improve varieties of Gram and production technique and Farm fields (15.02.13)

30 Farmers groups (Javikprotshahanyojna) from Khandwa district of Madhya Pradesh visited the Research trials Improve varieties of Gram and Organic seed production technique and Farm fields (16.02.13)

30 Farmers groups (ATMA) from Shahgargh, Sagar district of Madhya Pradesh visited the Research trials Improve varieties of Gram and production technique, advantage of Ammonium Molybdenum application and Farm fields (18.02.13)

30 Farmers groups (ATMA) from Mandsoore district of Madhya Pradesh visited the Research trials Rabi crop production technology and Farm fields (19.02.13)

30 Farmers groups (ATMA) from Lateri (Sironj), Vidisha district of Madhya Pradesh visited Improved varieties of Gram and production technique, different kinds of implements used in farm and Farm

fields (21.02.13)

30 Women Farmers groups (ATMA) from Vidisha district of Madhya Pradesh visited the Research trials Improve varieties of Gram and production technique, advantage of Ammonium Molybdenum Application, Agro met Lab. and Farm fields (22.02.13)

30 Women Farmers groups (ATMA) from Sagar district of Madhya Pradesh visited the Research trials Improve varieties of Gram and production technique, advantage of Ammonium Molybdenum Application and Farm fields, Agro met Lab. and Farm fields (22.02.13)

30 Farmers groups (Javikprotshahanyojna) from Ghatiya, Ujjain district of Madhya Pradesh visited the Research trials Improve varieties of Gram and production technique, advantage of Ammonium Molybdenum application and Farm fields (23.02.13)

30 Farmers groups (ATMA) from Damoh district of Madhya Pradesh Visited trials Improve Varieties of Gram and production technique, Horticulture and Farm Fields (23.02.13)

30 Farmers groups (ATMA) from Guna district of Madhya Pradesh Visited trials Improve Varieties of Gram and production technique, Horticulture and Farm Fields (27.02.13)

30 Farmers groups (ATMA) from Fanda, Bhopal district of Madhya Pradesh Visited trials Improve Varieties of Gram and production technique, Horticulture and Farm Fields (27.02.13)

30 Farmers groups (ATMA) from Narsinghpur district of Madhya Pradesh Visited trials Improve Varieties of Gram and production technique, Horticulture and Farm Fields (27.02.13)

30 Farmers groups (ATMA) from Khargone district of Madhya Pradesh Visited trials Improve Varieties of Gram and production technique, Horticulture and Farm Fields (02.03.13)

30 Farmers groups (ATMA) from Ganjbasoda, Vidisha district of Madhya Pradesh Visited trials Improve Varieties of Gram and production technique, Horticulture and Farm Fields (02.03.13)

30 Farmers groups (ATMA) from Mandasour district of Madhya Pradesh Visited trials Improve Varieties of Gram and production technique, Horticulture and Farm Fields (06.03.13)

30 Farmers groups (ATMA) from Bhikhangaon, Khargone district of Madhya Pradesh Visited trials Improve varieties of Gram and production technique, Horticulture and Farm Fields (06.03.13)

30 Farmers groups (ATMA) from Bhanpura, Mandasour district of Madhya Pradesh Visited trials Improve Varieties of Gram and production technique, Horticulture and Farm Fields (07.03.13)

30 Farmers groups (ATMA) from Bahoriband, Katani district of Madhya Pradesh Visited trials Improve Varieties of Gram and production technique, Horticulture and Farm Fields (07.03.13)

30 Farmers groups (Javikprotshahanyojna) from Meghanagar, Jhabua districts of Madhya Pradesh Visited trials of Ammonium Molybdenum application and their advantage and Farm Fields

(07.03.13)

30 Farmers groups (ATMA) from Chichali, Narsinghpur district of Madhya Pradesh Visited the Research Trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (07.03.13)

30 Farmers groups (ATMA) from Segaon, Khargone district of Madhya Pradesh Visited the Research Trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (09.03.13)

30 Farmers groups (ATMA) from Tikamgarh district of Madhya Pradesh Visited the Research trials, Advantage of Molybdenum application, INM in Chickpea and Farm fields (11.03.13)

30 Farmers groups (ATMA) from Badod, Shajapur district of Madhya Pradesh Visited the Research trials, Advantage of Molybdenum application, INM in Chickpea and Farm fields (12.03.13)

17 Farmers groups (ATMA) from Sujalpur, Shajapur district of Madhya Pradesh Visited the Research Trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (12.03.13)

16 Farmers groups (ATMA) from BhojBadodiya, Shajapur district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm Fields (13.03.13)

30 Farmers groups (ATMA) from Bairasiya, Bhopal district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (13.03.13)

30 Farmers groups (ATMA) from Shajapur district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (13.03.13)

30 Farmers groups (ATMA) from Garoth, Mandsoor district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (07.03.13)

30 Farmers groups (ATMA) from Baitul district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (14.03.13)

30 Farmers groups (ATMA) from Nalkheda, Shajapur district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (14.03.13)

30 Farmers groups (ATMA) from Sendhawa, Badwani district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (14.03.13)

30 Farmers groups (ATMA) from Nalcha, Dhard district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (14.03.13)

78 Farmers groups (ATMA) from Alirajpur district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (14.03.13)

25 Farmers groups (ATMA) from Bankhedi, Hosangabad district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (14.03.13)

25 Farmers groups (ATMA) from Hosangabad district of Madhya Pradesh Visited the Research

trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (14.03.13)

25 Farmers groups (ATMA) from Pipariya, Hosangabad district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (14.03.13)

25 Farmers groups (ATMA) from Sohagpur, Hosangabad district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (14.03.13)

30 Farmers groups (ATMA) from ChegaonMakhan, Khandwa district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm Fields (14.03.13)

36 Farmers groups (ATMA) from GHodadongari, Baitul district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (14.03.13)

30 Farmers groups (ATMA) from Guna district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (14.03.13)

30 Farmers groups (ATMA) from Sushaner, Shajapur district of Madhya Pradesh Visited the Research Trials on Molybdenum application, INM in Chickpea and Farm fields (14.03.13)

18 Farmers groups (ATMA) from Agar, Shajapur district of Madhya Pradesh Visited the Research trials, advantage of Molybdenum application, INM in Chickpea and Farm fields (15.03.13)

30 Farmers groups (NHM) from Narsinghpur district of Madhya Pradesh Visited the Research trials on INM, Horticulture & Vegetable crops production and Farmfields (16.03.13)

50 Farmers groups (ATMA) from Badwani district of Madhya Pradesh Visited the Research Trials on Molybdenum application, INM in Chickpea and Farm fields (19.03.13)

30 Farmers groups (ATMA) from Patera, Damoh district of Madhya Pradesh Visited the Research Trials on Molybdenum application, INM, lintil, Chickpea field and Farm fields (19.03.13)

30 Farmers groups (ATMA) from Banda&Shahgarh, Sagar district of Madhya Pradesh Visited the Research Trials on Rabi crop production, Farm fields and improved farm implements (19.03.13)

#### 5.6. Extension Activities other than KVKs:

<b>Extension Activities</b>	<b>113</b>	<b>2500</b>	<b>113</b>	<b>2400</b>
<b>Seed Production (Number of activity is as seeds in quintal)</b>	<b>250</b>	<b>-</b>	<b>101.30</b>	<b>-</b>
<b>Planting material ((Number of activity is as number of planting material)</b>	<b>3000</b>	<b>-</b>	<b>2955</b>	<b>-</b>

5.7. Production and supply of technological inputs:

**PRODUCTION and SUPPLY OF KHARIF AND RABI 2011-2012**

**KHARIF:**

Crop	Variety	Grade of seed	Total qty. of seed (q)	Seed sold	Quantity (q)	Balance
Soybean	JS 9560	N	75.60	KVK Shajapur	11.20	
				KVK Dhar	14.00	
				KVK Ashok Nagar	6.80	
				OIC Farm COA Gwalior	6.80	
				OIC Farm ZARS Morena	8.40	
				OIC Farm RARS Ujjain	5.20	
				PC KVK Jhabua	5.60	
				OIC Farm COH, Mandsaur	7.20	
				On farm sowing	10.40	
				<b>Total</b>	<b>75.60</b>	<b>Nil</b>
Soybean	JS 9305	N	75.30	ZARS Khargone	14.00	
				OIC Farm COA, Khandwa	12.00	
				OIC Farm RARS Ujjain	12.80	
				FRS Entkhedi	4.80	
				KVK Sheopur	1.20	
				OIC Farm KVK Bhind	1.60	
				OIC Farm COH, Mandsaur	6.40	
				RHRS Jaora	8.40	
				On farm sowing	14.10	
				<b>Total</b>	<b>75.30</b>	<b>Nil</b>
Soybean	JS 335	N	21.30	ZARS Morena	4.40	
				KVK Badwani	3.60	
				OIC Farm COH Mandasaur	3.60	
				On farm sowing	9.70	
				<b>Total</b>	<b>21.30</b>	<b>Nil</b>
Soybean	JG 335	Br	26.20	IISC Bhopal	0.80	
				Beej Sang, Ganjbasoda	5.00	
				Beej Sang, Chhatarpur	12.00	
				Beej Sang, Chhatarpur	8.00	

				Farmers Rajgarh	0.40	
				<b>Total</b>	<b>26.20</b>	<b>Nil</b>
Soybean	RVS 2001-4	RVS Seed	2.10	PC KVK Dhar	00.10	
				Farmers	2.00	
				<b>Total</b>	<b>2.10</b>	<b>Nil</b>
Soybean	RVS 2001-4	N seed	1.90	On farm sowing	1.90	<b>Nil</b>
Urid	RBU 38	N	0.40	KVK Jhabua	0.20	
				On farm sowing	0.20	<b>Nil</b>
		Br	3.10	MPSSC Bhopal	1.20	
				KVK Gwalior	0.20	
				KVK Lahar, Bhind	0.20	
				KV K Shajapur	0.80	
				Beej Sang Chhatarpur	0.70	
				<b>Total</b>	<b>3.10</b>	<b>Nil</b>
Arhar	JA 4	N	0.34	On farm sowing	<b>0.34</b>	<b>Nil</b>
		Br	6.70	FS Govt. farm Chanced	0.40	
				FS Govt. farm Fanda	1.00	
				FS Govt. farm Sarangpur	0.40	
				Dean (FLD Pigeon pea) Sehore	0.50	
				Farmers	0.48	
				<b>Total</b>	<b>2.78</b>	<b>3.92</b>
Arhar	ICP 2043	A line	2.48	OIC Farm Khandwa	0.08	
				DF JNKVV Jabalpur	0.60	
				OIC Farm Indore	0.14	
				Dean (FLD Pigeon pea) Sehore	0.16	
				On farm sowing	0.07	
				<b>Total</b>	<b>1.05</b>	<b>1.43</b>
Arhar	ICP 2043	B line	1.48	Dean (FLD Pigeon pea) Sehore	0.02	
				On farm sowing	0.03	1.43
Moong	TJM3	RVS seed	1.80	KVK Shajapur	0.30	
				KVK Ashok Nagar	0.40	1.10

**RABI**

Crop	Variety	Grade of Seed	Total qty. Of available seed	To whom sold	Qty. sold (q)	Balance
Gram	JG.130	N	69.47	OIC Farm ZARS Morena	8.00	-
				Dean, OIC Farm COH Mandsaur	19.20	-
				FRS Entkhedi	5.20	-
				KVK, Jhabua	3.20	-
				KVK, Shajapur	9.60	-
				KVK, Badwani	1.60	-
				Scientist RARS, Ujjain	1.60	-
				KVK, Seopur	4.80	-
				On farm sowing	7.07	9.20
				<b>Total</b>	<b>60.27</b>	<b>9.20</b>
Gram	JG130	B	68.53	ARS Ummadganj, Kota	0.03	-
				Govt. Farm Bhaswahi .Panna	0.80	-
				Govt. Farm Ajaygarh .Panna	2.40	-
				Govt. Farm Phanda, Bhopal	4.00	-
				Govt. Farm Farhadi, Rewa	3.20	-
				Govt. Farm, Silwani, Raisen	2.00	-
				Research Project , EFFAD, Sehore	0.30	-
				Beejsangh	55.80	-
				<b>Total</b>	<b>68.53</b>	<b>Nil</b>
Gram	JAKI.9218	N	31.50	OIC Farm COA. Khandwa	8.00	--
				ARS, Bagwai	4.00	--
				Research Project , EFFAD, Sehore	0.30	--
				RARS, Ujjain	10.00	-
				On Farm Sowing	5.90	3.30
				<b>Total</b>	<b>28.20</b>	<b>3.30</b>
Gram	JG-11	N	20.30	OIC Farm, Indore	6.40	--
				RHRS, Jaora	4.00	--
				ZARS, Khargone	0.80	--
				RARS,Ujjain	1.60	-
				On Farm Sowing	2.60	4.90
				<b>Total</b>	<b>15.40</b>	<b>4.90</b>
Gram	JG.11	B	24.70	ARS Ummadganj, Kota	0.03	--
				Beejsangh	21.40	-
				<b>Total</b>	<b>21.43</b>	<b>3.27</b>
Gram	JG.16	N	18.30	PC,KVK.Ashok Nagar	4.00	--
				PC,KVK. AronGuna	4.00	--
				Oic Farm, Sirsod	4.00	-
				On Farm,Sowing	4.80	-
				<b>Total</b>	<b>16.80</b>	<b>1.50</b>
Gram	JG.16	B	23.90	ARS Ummadganj, Kota	0.03	--
				Research Project , EFFAD, Sehore	0.30	-
				Beejsangh	22.05	-
				<b>Total</b>	<b>22.38</b>	<b>1.52</b>
Gram	JG.6	N	45.10	PC,KVK. Dewas	6.40	--
				PC,KVK. Bhind	8.00	--



Crop	Variety	Grade of Seed	Total qty. Of available seed	To whom sold	Qty. sold (q)	Balance
				PC,KVK. Dhar	16.00	-
				PC,KVK. Patan (Mandsaur)	4.80	-
				On Farm,Sowing	5.15	-
				<b>Total</b>	<b>40.35</b>	<b>4.75</b>
Gram.	JG.6	B	35.80	NSC, Niwari	10.00	--
				SFCI, Bhopal	5.00	-
				MPSSC ,Bhopal	13.60	-
				Govt. Farm, Mahagarh (Neemach)	6.40	-
				Beejsangh	0.80	-
				<b>Total</b>	<b>35.80</b>	<b>Nil</b>
Gram	JGK.3	N	16.99	PC,KVK. Dewas	6.40	-
				Oic Farm COA.Khandwa	1.60	-
				Oic Farm COA.Indore	4.00	-
				RARS, Ujjain	3.20	-
				On Farm,Sowing	1.79	-
				<b>Total</b>	<b>16.99</b>	<b>Nil</b>
Gram	JGK-3	B	6.01	ARS Ummedganj, Kota	0.01	-
				Research Project , EFFAD, Sehore	0.30	-
				Beejsangh	0.80	0.90
				<b>Total</b>	<b>5.11</b>	<b>0.90</b>
Lentil	JL-3	N	1.40	KVK Lahar, Bhind	0.70	-
				On Farm,Sowing	0.70	-
				<b>Total</b>	<b>1.40</b>	<b>Nil</b>
Lentil	JL-3	B	8.30	Govt. Farm Phanda, Bhopal	1.60	-
				Govt. Farm Rehti,Sehore	0.60	-
				Govt. Farm Silwani,Raisen	0.60	-
				Beejsangh	4.80	0.70
				<b>Total</b>	<b>7.60</b>	<b>0.70</b>
Wheat	Sujata	B	25.90	Beejsangh	20.80	-
				Farmers	4.10	-
				<b>Total</b>	<b>24.90</b>	<b>1.00</b>
Wheat	Sujata	N	2.45	On Farm, Sowing	<b>0.45</b>	<b>2.00</b>
				<b>Total</b>	<b>0.45</b>	<b>2.00</b>

#### 5.8. Soil, Water and Plant Analysis:

Details	No. of Samples	
	Rajgarh	Sehore
Soil Samples SHC	800	
Soil Samples	50	

<b>Water Samples</b>	<b>58</b>	
<b>Plant Samples</b>	-	
<b>Petiole Samples</b>	-	

## **5.9. Technology Transmitted through Electronic Media:**

### **5.9.1. Doordarshan:**

Time to time through Doordarshan Telecasts

### **5.9.2. Radio:**

Time to time through Radio broadcast

## **5.10. Kisan Mobile Services:**

Through weekly Video conferencing at collector ate.

Through mobile/ telephone

Through spot visit

## **5.11. SAC Meetings:**

## **5.12. Other Extension Activities:**

## **5.13. News Letters Published**

D.Damodar Reddy, D.Blaise, **B.Kumrawat**, A.K.Singh(2009) .“Carbon Management Index-A tool to evaluate Integrated Nutrient Management Interventions for Cotton on Vertisols” p 114. 4<sup>th</sup> World Congress on Conservation Agriculture, 4-7 February 2009, New Delhi.

LalSingh, B. Kumrawat, A. Shrivastava (2008). Cultivation Mango, Papaya, Mandarin, Aonla, Soybean, Gram, Corriander, Vermiculture, Soil testin.

## **5.14. Publication:**

1. Arhar Mein KeetNiyantaran: A.N. Tikle ,Sandeep Sharma, Surendra Singh
2. Tuar Ki SankarKismonKeVikas Mein JeevDravyaNarbandhyata Ki Upyogita, SthitiEvam Sambhavnayan: A.N. Tikleand H.S.Yadav
3. SankarArhar Ki BeejUtpadanTakneek: Dr.A.N.Tikle, V.S.Kandalkar, and H.S.Yadava
4. ChaneEvamMassor Ki UnnatKheti: A.N.Tikle, D.R.Saxena, M.Yasin and V.S.Gautam
5. Hybrid Seed production Technology in Pigeonpea: A.N. Tikle, H.S.Yadava, V.S.Kandalkar and M.K.Saxena

## **5.15. Activities of Directorate of Extension other than KVKs:**

Participated in District and Zonal meeting of Kharif and Rabi Planning.

Time to time participated at District and Zonal level meeting of Kharif and Rabi as required by Collector/JDA/DDa

**5.15.1. Training programs organized:**Four- Venue RAK College of agriculture, Sehore

क्र	दिनांक	विषय	योजना	प्रयोजन	संख्या
1.	04 से 05 अक्टूबर 2012 अवधि (दो दिवसीय)	रबीपूर्वगेहूँ एवंचनाउत्पादनतकनीकप्रशिक्षण	आत्माखरगौन	DDA Khargon	40
2.	27 से 31 दिसम्बर 2012 अवधि (पाँच दिवसीय)	रबीफसलउत्पादनतकनीकप्रशिक्षण	आत्माविदिशा	DDA Vidisha	22
3.	08 से 12 जनवरी 2013 अवधि (पाँच दिवसीय)	रबीफसलउत्पादनतकनीकप्रशिक्षण	आत्माविदिशा	DDA Vidisha	25
4.	19 से 23 फरवरी 2013 अवधि (पाँच दिवसीय)	रबीफसलउत्पादनतकनीकप्रशिक्षण	आत्माविदिशा	DDA Vidisha	39

**5.15.2. Workshop/meetings organized:**

Monthly Meeting of all project in-charge and head of section.

Participated JAICA meeting at CIAE on 27.02.13

Participated JAICA meeting at PS office on 13.03.13

Participated Deans meeting at ANGARU, Hyderabad from 09-10.06.13

District level meeting of Department of Agriculture at COA Sehore on 21.04.12

**5.14.3.Publications**

KharifFaslo me SamnvitKeetVyadhiPrabandhan	BhagwanKumrawat,A. Shrivastav, D.K. Suryavanshi
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	Lal Singh & Mukesh singh
Nursery management	Lal Singh, Mukesh singh, D.K. Suryavanshi , B. Kumrawat & A. Shrivastav.
Production of technology of Vegetables	Lalsingh, Dr. A. Shrivastava ,D.K. Suryawanshi,Mukeshsingh ,B. Kumrawat
Production technology of Fruit Crops	Lalsingh, Dr. A. Shrivastava ,D.K. Suryawanshi ,Mukeshsingh ,B. Kumrawat
Establishment of Orchard	Lalsingh, Dr. A. Shrivastava ,D.K. Suryawanshi ,Mukeshsingh ,B. Kumrawat
Method of micro irrigation system	B. Kumarawat, Dr. G.R. Ambawatia Lal singh Ankita pandey and Dr. A. Shrivastava
Pest management in vegetable Crops	Mukesh snigh, Lalsingh And A.Shrivastava
Methods of mango preservation	Lalsingh, AnkitaPandey and Dr. A. Shrivastava
Top Working of Old Orchard	Lal Singh,Mukesh Singh, Ankita Pandey,A. Shrivastava and G.R. Ambawatia
Top Working of Old Orchard	Lal Singh,Mukesh Singh, Ankita Pandey,A. Shrivastava and G.R. Ambawatia
Advantage of Summer Deep Plough	Mukesh Singh
Adarsh flodhyan lagane ka tarika	Lalsingh ,Mukeshsingh,G.R. Ambawatia
Phaldar podho me bridhi harmone ka upyag	Lalsingh ,Mukeshsingh,G.R. Ambawatia
Varshakalin Podh hetu Podhshala pravandhan	Lal Singh,Mukesh Singh, R.S.Pawak,A. Shrivastava
Sarso ki Veganic khedi	Mukeshsingh, Lalsingh and A. Shrivastava
Phal Vraksho me Unnat Top Working	Lalsingh, Mukeshsingh, AnkitaPandey and A. Shrivastava
Technological knowledge of Mandarin growers	Singh Lal, ShrivastavaAkhilesh and PandeyAnkita
Innovative technological approaches for harnessing potential of ArkaNavneet round purple brinjal (SolanumMelongena L.) in Malwa Plateau zone of M.P.	Singh Lal, Kulmi, G.S., ShrivastavaAkhilesh, Ambawatia G.R. and Singh Mukesh
Technology Innovations for sustainable production of CS 6 seed spices coriander (Coriandrum sativum	Singh Lal, Kulmi, G.S., ShrivastavaAkhilesh, Ambawatia G.R. and Singh Mukesh

L.) in Malwa Plateau zone of M.P.	
Knowledge level of farm women regarding ergonomic tools and equipments	ShrivastavaAkhilesh, PandeyAnkita and Singh Lal
An analysis of Wheat marketing and its constraints faced by farmers in Vidisha district of M.P.	Ahirwar R.F, Raghuveer and <i>Singh Mukesh</i>

#### 5.16. Visitors

Dr.U.P.S. Bhadoriya, JDE, RVSKVV, Gwalior, visited KVK Rajgarh on 12.10.12

Dr. Solanki, IIRP, Kanpur,visited KVK Rajgarh on 11.01.13

Dr. Shivhare, IIRP, Kanpur,visited KVK Rajgarh on 11.01.13

Dr. S.S.Tomar,DES, RVSKVV, Gwalior, visited KVK Rajgarh on 04.02.13

#### 6. Library & Documentation Services:

Books & Journals:

No. of Books Total available: 28272

Books purchased during the year:2403

Name of Journals subscribed: Nil

Cataloging of Books & Journal: Books classification -DDC

Journals – Alphabetical

Journals purchased during the year: Nil

Library works: Routing Library work, Maintenance

Resource Management

(i) No. of Books in Book Bank: 441

(ii) Resource Generation: Nil

Facilities Generated

(i) Photocopies “Computers” Internet facilities are available

(ii) Library Services: Books newspaper, magazines, journals provided to student and staff member

## **7. Infrastructure Development:**

Renovation of PG class room.

Modernization of UG/PG class room.

Renovation of Account section Renovation of Examination hall.

Renovation of Agril.Economics Lab.

Renovation of Agril.Engg.Lab.

Renovation of Horticulture Professor Room.

Renovation of Academic Section.

Renovation of Conference hall.

Renovation of Hostel computer room

Renovation of Dispensary.

Renovation of Intercom facilities.

Renovation of Bio-Tech Lab.

Renovation of Extension PG Class room

Renovation of Library.

## **8. General Administration and Finance:**Satisfactory

### **9. Important Events:**

Old student's conference from 01.12.12 to 03.12.12

Conducted PSC Examination on 24.02.13

Conducted Adar Card Camp with Collaboration with IDBI Bank, Sehore From 06.06.13 to 10.06.13

#### **9.1.First Convocation:**21<sup>st</sup> July, 2012

#### **9.2 Seminars/Conferences /Workshops etc at RVSKVV College:**

Organic Farming conference at Conference hall, COA, Sehore on 22.2.13 to 23.2.13

Departmental Workshop at conference hall on 16-17.03.13

## **10. Human Resource Development:**

### **10.1. Participation of Scientist in National/International: Seminars/Symposia/Conference/Short Courses /Training /Workshops/Summer and Winter Schools etc.**

Dr.S.R. Ramgiry Principal Sci.Plant Breeding and Genetics Visited South Africa (Durban) from 17.02.2013 to 22.02.2013 and presented abstracts paper on “Genetic Improvement of Soybean in India “No. 214 in world Soybean research conference 2013 under JICA funded Project.

Dr. (Mrs) Moly Saxena Principal Scientist Plant Pathology Visited Brazil“from 17.01.2013 to 02.02.2013 under learning trip on “Soybean cultivation techniques and its extension activities At Brazil under JICA Project on maximization Soybean production in M.P.

Dr.M.Yasin Chickpea Breeder, AICRP on Chickpea attended annualreview meeting of BREAD PROJECT at University of California Davis U.S.A. in 25.06.2012 to 01.07. 2012.

Dr.M.S. Parihar Associated Professor visited Holland for enhancing the Post graduateStudies of Horticultural crops between Holland and RVSKVV, Gwalior from 1 -7 Sept.2012.

Dr. H.B.S. Bhadoriya, Professor visited Germany in 11.11.12 to 17.11.12.

Dr. A.N. TickleSr. Scientist (Plant Breeding & Genetics) attendedInnovative Approaches to Crop Improvement and adaptation: Meeting Challenges of Climate Change at University of Agricultural Sciences, Banglore- 22-24 February 2013 and presented paper ‘*Assessment of pigeonpea genotypes (Cajanus cajan L. (Millsp.) for drought tolerance in central India*’.

## **11. Awards and Recognitions:**

All India Best Center Award to All India Coordinated Research Project on Chickpea (ICAR)

District level fist place winning trophy by RAK College of Agriculture, Sehore on the eve of Republican Day 2013

## **12. Exhibition:Four**

College cum University Exhibition Stall in

KishanMela at ISS, Bhopal- 30.1.13 to1.2.13

International Horticulture Expo.at BHEL, Bhopal – 1-3Feb.2013

KishanPanchayat at DashaharaMaidan, Bhopal - 3.2.2013

Interface Meeting at Hotel Palash, Bhopal - 4.2.2013

### **13. Visits Abroad:**

Dr.S.R. Ramgiry Principal Sci.Plant Breeding and Genetics Visited South Africa (Durban) from 17.02.2013 to 22.02.2013 and presented abstracts paper on “Genetic Improvement of Soybean in India “No. 214 in world Soybean research conference 2013 under JICA funded Project.

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Dr. H.B.S. Bhadoriya, Professor visited Germany in 11.11.12 to 17.11.12.

### **14. Distinguished Visitors:**

Dr. V. S. Tomar, VC, RVSKVV, Gwalior, visited on 30.05.12

Dr.Y.M.Kool, DFA, RVSKVV, Gwalior,visited on 12.08.12

Dr. H.S. Yadav, DRS, RVSKVV, Gwalior,visited on 19.08.12

A team of JAICA visited on 20.08.12

Dr. H.S. Yadav, DRS, RVSKVV, Gwalior,visited on 09-10.10.12

Dr. B.S. Baghel, VC & DFA, RVSKVV, Gwalior,visited on 26-27.08.12

Dr. P.S. Lamba, First Dean RAK& Ex VC,visited on 01- 03.12.12

Dr. R.N. Pahalwan, First Professor RAK, Ex. Proff. Agril.Engg. Visited on 01- 03.12.12

Dr. Sadhuram Sharma, First Student RAK, Ex. Sugarcane Commissioner MP State,visited on 01- 03.12.12

Mr. Gajanan Wakankar, First IFS RAK, Ex. Ambassador,visited on 01- 03.12.12

Dr. D.P.Singh, Ex. VC, JNKVV, Jabalpur, M.P.visited on 01- 03.12.12

Dr.Gopal Singh Kaushal, Ex. Director Agriculture M.P. State visited on 01- 03.12.12

Dr. J.S. Raghu, Ex. DES, JNKVV, Jabalpur, M.P.visited on 01- 03.12.12

Dr. D.S.Marothiya, Ex. Proff. & Head Agril.Eco.IGKVV,Raipur& Member Planning Commission visited on 01- 03.12.12



Dr. Omkar Nath Dhar, Ex. Director, visited on 01-03.12.12

Dr. M.M. Hussen, Ex. Director Agriculture and Ex. PSC Member M.P. State, visited on 01-03.12.12

Dr. Sangram Singh Tomar, Ex. Director Agriculture M.P. State, visited on 01-03.12.12

Dr. S.C. Deshmukh, Ex. Prof. & Head Agronomy, JNKVV, Campus Indore, visited on 01-03.12.12

Dr. Gyan Prasad Saxena, Ex. Director Agriculture M.P. State, visited on 01-03.12.12

Mr. Arun Dike, Organic Farming Specialist, visited on 01-03.12.12

Mr. Anant M. Oza, Ret. Chief Manager, Bank of India, visited on 01-03.12.12

Prof. A.K. Singh, VC, RVSKVV, Gwalior, visited on 02.12.12

Dr. A.K. Tiwari, Member Planning Commission, visited KVK Rajgarh on 11.01.13

Dr. P.M. Gour, International Chickpea Scientist ICRISAT visited on 17.01.2013

Dr. Patil Scientific Officer, ICRISAT visited on 17.01.2013

Dr. N.P. Singh, Coordinator Chickpea, IIRP, Kanpur, visited on 02.02.13

Dr. S.S. Tomar, DES, RVSKVV, Gwalior, visited KVK Rajgarh on 04.02.13

Honorable Karan Singh Verma, Board Member, RVSKVV, Gwalior visited NSS camp, visited on 05.03.13

Dr. N. Nadrajan, Director, IIRP, Kanpur, visited on 12.03.13

Dr. N.P. Singh, Coordinator, IIRP, Kanpur, visited on 12.03.13

Dr. H.S. Yadav, DRS, RVSKVV, Gwalior on 13.03.13

Dr. H.S. Yadav, DRS, RVSKVV, Gwalior on 28.03.13

## **15. Publications:**

### **15.1 Publication in National/International Journal/Books /Books Chapter/Technical Pamphlets**

**/Composition/ Seminar/ Hindi Articles /Review paper.**

#### **International Journal**

K B Saxena, R V Kumar, A N Tikle, M K Saxena, V S Gautam, S K Rao, D Khare, Y S Chauhan, R K Saxena, B V Subba Reddy, D Sharma, L J Reddy, John Melvin Green, D G Faris, Y L Nene, Myer Mula, Rafat Sultana, R K Srivastava, C L LGowda, S L Sawargaonkar, R K Varshney (2013). ICPH 2671 – the world's first commercial food legume hybrid. *Plant Breeding* March 2013.

#### **National journal**

Parmar, R.K., Tikle, A.N. and V.S. Kandalkar (2012). Heterosis and combining ability studies in pigeonpea (*Cajanus cajan*(L.) Millsp) hybrids *Journal of Food Legumes* 25(2): 1-5.

Gupta, S.C. and S.Gangwar (2012).Effect of molebdenum, iron and microbial inoculation on symbiotic traits, nutrient uptake and yield of chickpea.*Journal of Food Legumes*125 (1): 45-49.

Gupta, S.C. and SeemaSahu (2012). Response of chickpea to micro nutrients and biofertilizers in vertisols.*Legume Res.* 35(3): 248-251.

#### **15.2 RVSKVV Publication 2012-13 at a Glance:**

#### **15.3 Glimpses of RVSKVV Publications:**

#### **16. RVSKVV in News:**

#### **17. Promotion/Selection/ Deputations:**

Dr. M.S. Parihar promoted from Asstt. Proff. (Selection grade) to Associate Professor (Horticulture)

Dr. H.B.S. Bhadoriya, Professor (Animal Husbandry) joined as M.D. Poultry & Animal Production, Bhopal on deputation

#### **18. Superannuation:**

1.Shr. Hari PrasadParmar, Peon on 31.05.2012

2. Sh. Ramesh Chandra Yadav, Peon on 30.06.2012

3. Sh. Dhanlal, Pump Operator on 31.01.2013

#### **Appendices**

#### **Extension activities of KVK Rajagarh**

Activity	No. of activities
Field Day	12
KisanMela	1
KisanGhoshi	5
Exhibition	3
Film Show	21
Method Demonstrations	7
Workshop	2
Group meetings	7
Lectures delivered as resource persons	45

Newspaper coverage	28
Radio talks	1
Popular articles	9
Extension Literature	7
Farm advisory Services	12
Scientific visit to farmers field	31
Farmers visit to KVK	47
Diagnostic visits	7
Exposure visits	2
Ex-trainees Sammelan	1
Soil health Camp	6
Animal Health Camp	1
Soil test campaigns	4
Self Help Group conveners meetings	5
MahilaMandals conveners meetings	2
Celebration of important days	4

