

ACTION PLAN 2013-14

(DES-FORMAT)



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PROPOSED ON-FARM TRIALS (OFTs)

Title 01 : Demonstration on formation of SHG for preparation of value of added product.

Season & Year	:	Kharif 2013, Rabi 2013-14
Problem	:	Low income of farm women due to lack of participation in SHG making regarding income generating activities.
Thematic Area	:	Income generation
Name of Technology	:	Performance of broadcast direct seeded rice with reduced seed rate and use of post emergence (P.E.) herbicides.
Source of Technology	:	IGKV, Raipur
Farmers' Practice (T ₁)	:	Farmers practice (without income generating activities)
Assessed Recommended Practice (T ₂)	:	SHG (income generating activities)
Observation to be recorded	:	Technical observation on regular seving used for income generating activities, keeping quality of value added product.
No. Of Trials (Replication)	:	04
Name SMS responsible for OFT	:	Smt. N. Pathak & Dr. Kiran Gupta

Title 02: Assessment of income generation of farm women involved in value addition.

Season & Year	:	Kharif, 2013, Rabi 2013-14
Problem	:	Westage of fruits and vegetable
Thematic Area	:	Income genration
Name of Technology	:	Value addiition enhances the throughout availability.
Source of Technology	:	JNKVV, Jabalpur
Farmers' Practice (T ₁)	:	No value addition in seasonal fruits.
Assessed Recommended Practice (T ₂)	:	Value addition in seasonal fruits
Observation to be recorded	:	NET return,CB ratio< feed back, Farm Womens reaction
No. Of Trials (Replication)	:	06 product will be prepared
Name SMS responsible for OFT	:	Smt. N. Pathak & Dr. Kiran Gupta

Title 03: Assessment of effect of Vitamin A rich food among 5-7 year age group children suffering from Vitain A deficiency.

Season & Year	:	Rabi 2013-14
Problem	:	Vitamin A deficiency among children.
Thematic Area	:	Nutritional security.
Name of Technology	:	Niger seeds, rice flakes, lotus stem, radish leaf, carrot, spinach and mint (100 g each) will be taken in dried form. 20 g of this AICRP mix will be included in the daily diet of children in form of powder (mix with chappati, dal, soup ect.)
Source of Technology	:	MPUAT Udaipur, 1999-2001
Farmers' Practice (T ₁)	:	Non inclusion of Vitamin A rich food in daily diet.
Assessed Recommended Practice (T ₂)	:	20 g of AICRP mix which contains 8333.5 muci gram beta caritene abd 8.37 mg of Iron will be given to children for 120 days this fulfils 1/3 of per day vitamin A requirment of children.
Observation to be recorded	:	Observations on: Physical features-Biot's spot, poor vision, night-blindness. Before and after
No. of Trials (Replication)	:	10
Name SMS responsible for OFT	:	Dr. Kiran Gupta & Smt. N. Pathak

Title 04: Assessment of Plant extract & chemicals against Bacterial leaf blight (BLB) of paddy

Season & Year	: Kharif, 2013
Problem	: High yielding varieties i.e Swarna & scented varieties are suffering from Bacterial Blight causing yield loss
Thematic Area	: Integrated disease management /PL
Name of Technology	: Evaluation of Streptocycline and Contaf as seed treatment & foliar spray of plant extract to minimize the yield loss
Source of Technology	: IGKV, Raipur, IRRI Philippines
Farmers' Practice (T ₁)	: Seed treatment by brine solution
Assessed Recommended Practice (T ₂)	: Seed treatment by streptocycline + Contaf followed by 05 spray of plant extract (Neem) at the interval of 15 days during vegetative growth.
Assessed Recommended Practice (T ₃)	: Basal & foliar application of Potash + znso ₄ @ 10 kg/acre & application of <i>pseudomonas florescence's</i> applied as a seed treatment before sowing, root dip prior to transplanting and two foliar sprays during incidence of pathogen.
Observation to be recorded	: Disease severity & incidence, plant height , grain yield
No. Of Trials (Replication)	: 04
Name SMS responsible for OFT	: VINOD NIRMALKAR

Title 05: Assessment of IPM module especially eco-friendly against *Helicoverpa* and wilt/Collar rot destructive pest of gram

Season & Year	: Rabi, 2013-2014
Problem	: <i>Helicoverpa</i> and wilt destructive pest of gram
Thematic Area	: Integrated crop management
Name of Technology	: IPM modules
Source of Technology	: IGKV, Raipur, TANU & ICAR
Farmers' Practice (T ₁)	: Seed treatment with Carbendazim
Assessed Recommended Practice (T ₂)	: Seed treatment with vitavax power 2gm/kg + soil treatment 1.5 kg/qt /acre of fym with <i>Trichoderma</i> + Coriender mixed with gram + pheromone trap +Bird perches + Application of NPV 250 LE /hac with jaggery 0.5% @ 1kg/hac thrice in the interval of 10-15 days on observing egg mass or frist instar larva + NSKE 5% with 1% soap solution
Assessed Recommended Practice (T ₃)	: <i>Trichoderma</i> 10g/kg seed + soil treatment 1.5 kg/qt / acre of fym with <i>Trichoderma</i> + Coriender mixed with gram + pheromone trap +Bird perches + NSKE 5% with 1% soap solution
Observation to be recorded	: Wilt incidence, severity, plant bio-mass, yield
No. Of Trials (Replication)	: 04
Name SMS responsible for OFT	: VINOD NIRMALKAR

Title 06: Assessment of bio-pesticides & Chemical against blight disease of Potato

Season & Year	: Kharif, 2013
Problem	: Low yield obtained by farmers due to early blight
Thematic Area	: Disease Management/PL
Name of Technology	: Managemnt of blight by mixed formulation of chemicals & bio-pesticides
Source of Technology	: IGKV, Raipur
Farmers' Practice (T ₁)	: Late sowing after 15 th dec + Tuber treatment by carbendazim
Assessed Recommended Practice (T ₂)	: Date of sowing 15 th of Nov + Balance dose of nitrogen fertilizer + Famoxadone 16.6% + Cymoxanil 22.10% as foliar spray at 30, 45 and 60 days after planting (DAP) or (applied at tasseling/silking)
Assessed Recommended Practice (T ₃)	: Date of sowing 30 th of Nov + NSKE 5% with 1% soap solution applied at growth stage V6 (six-collars visible on plant) + Azostrobin
Observation to be recorded	: Disease severity, Yield, their yield gap, technology gap, and extension gap and technology index were analyzed. Tuber size, No. of Tuber, Vegetative period, Maturity periods
No. Of Trials (Replication)	: 04 to 05
Name SMS responsible for OFT	: VINOD NIRMALKAR

Title 07: Integrated disease and insect management of vegetable nursery

Season & Year	: Kharif, 2013
Problem	: High mortalities in vegetable nursery due to insect and disease i.e. damping off, bacterial blight, root rot, virus diseases and nematodes
Thematic Area	: Disease Management/PL
Name of Technology	: Integrated pest management of nursery vegetables
Source of Technology	: IIVR, Varanasi 2011
Farmers' Practice (T ₁)	: Seed treatment by bavistin ,No nursery treatment
Assessed Recommended Practice (T ₂)	: Soil application by formaldehyde & Carbofuran + after 12 days seed treatment by vitavax power & <i>Pseudomonas fluorescense</i> @10gm/kg
Assessed Recommended Practice (T ₃)	: Soil application by Captan 2gm/ltr m ² ,Carbofuran & <i>Trichoderma sp.</i> 10gm/m ² + after 03 days seed treatment by <i>Trichoderma sp.</i> 10gm/kg & Imidacloprid
Observation to be recorded	: Germination %, disease records, % Mortality by disease
No. Of Trials (Replication)	: 04 to 05
Name SMS responsible for OFT	: VINOD NIRMALKAR

Title 08: Assessment of foliar application of boron to increase the productivity of cucurbitaceous crops

Season & Year	Rabi-2013
Problem	Lower Yield
Thematic Area	Micro Nutrient Management
Name of Technology	Production technology
Source of Technology	ICAR
Farmers Practice (T₁)	Traditional practice (No use Boron)
Assessed Rec. Practice (T₂)	Use of boron in the form of Boric Acid
No. of Trials (Replication)	4
Name of SMS responsible for OFT	Devendra Upadhyay

Title09: Assessment of Chilli variety Indira Chilli -1

Season & Year	Kharif-2013
Problem	Low yield due to leaf curl
Thematic Area	Varietal assessment
Name of Technology	Use of resistant variety
Source of Technology	IGKV,2011
Farmers Practice (T₁)	Variety susceptible to leaf curl
Assessed Rec. Practice (T₂)	variety Indira Chilli-1
No. of Trials (Replication)	05
Name of SMS responsible for OFT	Devendra Upadhyay

Title10: Assessment of Date of Planting (DOP) of Chrysanthemum

Title	Assessment of Date of Planting (DOP)of Chrysanthemum
Season & Year	Kharif-2013
Problem	Poor Flower Yield
Thematic Area	Production and Yield development
Name of Technology	Production technology
Source of Technology	I.G.K.V., Raipur
Farmers Practice (T₁)	DOP at September
Assessed Rec. Practice (T₂)	DOP at10 August , DOP at 20 Aug and DOP at 30 Aug
No. of Trials (Replication)	4
Name of SMS responsible for OFT	Devendra Upadhyay

Title 11: Evaluation of improvement in Biasi Cultivation of Rice through crop management.

Season & Year	:	Kharif 2013
Problem	:	Use of high seed rate coupled with heavy infestation of weeds in biasi system of rice cultivation. Some times crop fails due to drought situation occurred at the time of biasi.
Thematic Area	:	Integrated crop management.
Name of Technology	:	Performance of broadcast direct seeded rice with reduced seed rate and use of post emergence (Po. E.) herbicides.
Source of Technology	:	IGKV, Raipur
Farmers' Practice (T ₁)	:	100 kg seed/ha. + beushening (biasi)
Assessed Recommended Practice (T ₂)	:	60 kg seed/ha + pre eg. Pyrazosulfuron (5-10 DAS) + Bispyribac Na (POE at 40 DAS)
Assessed Recommended Practice (T ₃)	:	60 kg seed / ha. + preeg. Laundex power [Bensulfuron (0.6%) + prtilachlar (6%)] (0-3 DSABu) + Need based hand weeding.
Observation to be recorded	:	No. of plants/m ² , No. of effective tillers/m ² , plant population/m ² + grain yield/m ² , test weight, weed population/m at 30:60:90 DAS & at harvest
No. Of Trials (Replication)	:	04 to 05
Name SMS responsible for OFT	:	Shilpa Kaushik

Title 12 : Assessment of SRI Technology and use of orgaininc sources and weed management.

Season & Year	:	Kharif, 2013
Problem	:	Low yield due to less use of organic sources and high weed infestation
Thematic Area	:	Nutrient management and weed management
Name of Technology	:	SRI
Source of Technology	:	IGKV, Raipur
Farmers' Practice (T ₁)	:	SRI Farmer practice
Assessed Recommended Practice (T ₂)	:	SRI (partial) +Green manuring
Assessed Recommended Practice (T ₃)	:	SRI + Brown manuring through Bispyribac Na 20 gm a.i./ha. at 30-35 DAS
Assessed Recommended Practice (T ₄)	:	SRI + Conoweeder
Observation to be recorded	:	No. of plants/m ² , No. of effective tillers/m ² , plant population/m ² + grain yield/m ² , test weight, weed population/m at 30:60 DAS & at harvest
No. Of Trials (Replication)	:	04 to 05
Name SMS responsible for OFT	:	Shilpa Kaushik

Title 13 : Assessment of improved variety of wheat var CG-1006.

Season & Year	: Rabi 2013-14
Problem	: Harming low yield potential variety of wheat in comparison to GW-273.
Thematic Area	: Varietal replacement.
Name of Technology	: Var. CG1006 Wheat.
Source of Technology	: IGKV, Raipur (TCBCARS), Bilaspur
Farmers' Practice (T ₁)	: Variety GW-273
Assessed Recommended Practice (T ₂)	: Var. CG1006 Wheat.
Observation to be recorded	: No. of plants/m ² , No. of effective tillers/m ² , plant population/m ² + grain yield/m, test weight.
No. of Trials (Replication)	: 04
Name SMS responsible for OFT	: Shilpa Kaushik

Title 14: Refinement of foliar application of sulphur & Nitrogen in linseed.

Season & Year	: Rabi 2013-14
Problem	: Low yield of linseed
Thematic Area	: Nutrient manipulation.
Name of Technology	: Nutrient application in the ratio of (30:20:20) N: P ₂ O ₅ : K and foliar application of sulphur & Nitrogen.
Source of Technology	: IGKV, Raipur (TCBCARS, Bilaspur)
Farmers' Practice (T ₁)	: 60:30:30 Recommended dose of NPK in linseed
Assessed Recommended Practice (T ₂)	: 30:20:20 NPK+ foliar application of sulphur & Nitrogen
Observation recorded	: Plant population/m ² , plant height, No. of pods/ plant, no. of seeds/ pods, test weight, grain yield.
No. of Trials (Replication)	: 4
Name SMS responsible for OFT	: Shilpa Kaushik

Frontline Demonstration

Title01 : Management of wilt complex/collar rot/root rot through antagonistic microorganism and chemicals.

Season & Year	: Rabi, 2013-2014
Problem	: Wilt complex causing heavy yield loss
Thematic Area	: IPM/Disease management
Name of Technology	: Seed & soil treatment by antagonistic microorganism and chemicals
Source of Technology	: IGKV, Raipur
Farmers' Practice (T ₁)	: Seed treatment with thiram
Assessed Recommended Practice (T ₂)	: Soil treatment by <i>Trichoderma viride</i> @ 1.5 kg/qt. of FYM/Acre + Seed treatment with Vitavax power @ 2gm/kg + Seed treatment @ 10gm/kg by <i>Pseudomonas fluorescences</i> & <i>Rhizobium</i>
Observation to be recorded	: Germination %, Disease incidence, shoot length, root length, dry weight of root, shoot weight, no. of nodulation, number of branches & yield q/hac
Area under FLD	: 05 hac
Name SMS responsible for FLD	: Vinod Nirmalkar

Title02 : Integrated management of blast & stem borer by using NSKE, Eco-friendly bio-agents & resistant inducing chemical salicylic acid under rainfed & irrigated condition.

Season & Year	: Kharif, 2013
Problem	: Blast and stem borer causing serious losses in the area
Thematic Area	: Integrated pest management
Name of Technology	: Eco-friendly management of stem borer and blast by using NSKE, Eco-friendly bio-agents & resistant inducing chemical salicylic acid under rainfed & irrigated condition.
Source of Technology	: IGKV, Raipur & IRRI Philippines, VBS Purvanchal University, Jaunpur 2012, Annamalai University, Annamalai Nagar, Tamil Nadu 2012
Farmers' Practice (T ₁)	: Seed treatment by chemicals Carbendazim
T ₂	: Seed treatment with <i>Trichoderma</i> & foliar application with <i>P. fluorescences</i> , salicylic acid (0.1%) & Foliar application of NSKE 5% & Datura leaf on 15 and 30 days after sowing
Observation to be recorded	: Blast severity was assessed 95 days after sowing by adopting 0-9 scale. The percent disease index was calculated. The per cent disease incidence was also calculated.
Area under FLD	: 05 hac
Name SMS responsible for FLD	: VINOD NIRMALKAR

Title03: FLD on Weed Management in Onion

Season & Year	Rabi-2013
Problem	Low yield due to Weed in onion
Thematic Area	Crop Production
Name of Technology	Weed Management
Source of Technology	Directorate of Onion and Garlic, Rajguru Nagar Pune
Farmers Practice (T ₁)	No use of Herbicide
Assessed Rec. Practice (T ₂)	Use of Herbicides i.e. Pendimethalin @ 3.5 l/ha +one hand weeding at 35 DAP
No. of Trials (Replication)	5

Title04: Assessment of RDF in Onion

Title	Assessment of RDF in Onion
Season & Year	Rabi-2013
Problem	Low yield due to Nutrient imbalance
Thematic Area	Nutrient management
Name of Technology	Weed Management
Source of Technology	Directorate of Onion and Garlic, Rajguru Nagar Pune
Farmers Practice (T ₁)	Imbalance use of NPK
Assessed Rec. Practice (T ₂)	RDF 100:50:50 N:P:K/ha.
No. of Trials (Replication)	5

FLD 5: Assessment of SRI Technology

Season & Year	:	Kharif 2013
Problem	:	Actual SRI technology system of cultivation is not under implementation
Thematic Area	:	Integrated crop management.
Name of Technology	:	SRI
Source of Technology	:	IGKV, Raipur
Farmers' Practice (T ₁)	:	50 kg seed/ha + line sowing
Assessed Recommended Practice (T ₂)	:	Improved SRI Technology(Early transplanting, Spacing, Single seedling, organic matter, water management, weed management)
Observation to be recorded	:	No. of plants/m ² , No. of effective tillers/m ² , plant population/m ² + grain yield/m ² , test weight, weed population/m ² at 30:60:90 DAS & at harvest
No. Of Trials (Replication)	:	12 to 13
Name SMS responsible for OFT	:	Shilpa Kaushik

FLD 6: Cultivation of summer maize

Season & Year	:	Rabi 2013
Problem	:	In Chhattisgarh summer paddy is popular among farmers and day by day the area of paddy cultivation is increasing and from this soil health is deteriorating.
Thematic Area	:	Crop diversification..
Name of Technology	:	Replacement of summer paddy
Source of Technology	:	IGKV, Raipur
Farmers' Practice (T ₁)	:	Summer Paddy
Assessed Recommended Practice (T ₂)	:	Summer Maize

Observation to be recorded	:	No. of plants/m ² , No. of cobs/m ² , plant population/m ² grain yield/m, test weight
No. Of Trials (Replication)	:	12 to 13
Name SMS responsible for OFT	:	Shilpa Kaushik

Other proposed FLD

Thematic area	Name of Crop/ Enterprise	Season and year	Technology demonstrated	Crop- Area (ha) / Entrep - No.	Name of Variety Entreprizes
CP	Sesame	Kharif 2013	Improved variety	5.0	TKG-306
CP	Chickpea	Rabi 2013	Improved variety, seed treatment	5.0	Vaibhav/JG-11
CP	Safflower	Rabi 2013	Improved variety, seed treatment	5.0	AKS-2007, PBNS-40
CP	Pigeonpea	Kharif 2013	Improved variety, balance fertilizer	5.0	Rajivlochan, Pragti
WOE	Mushroom	Kharif and Rabi 2013	Method demonstration	6 no.	Pleurotus florida
WOE	Nutrition Garden	Kharif and Rabi 2013	Improved variety, seed treatment	6 no.	Improved variety of Vegetables
WOE	Onion	Kharif and Rabi 2013	Improved storage structure	6 no.	Improved storage structure
WOE	Fruit & Vegetable	Kharif and Rabi 2013	Formation of SHG & Preparation of value added product	6 no.	Formation of SHG & Preparation of value added product
WOE	Paddy	Kharif 2013	For FW drudgery reduction & increasing efficiency through improved sickle	1.60	Improved sickle

Proposed training Programme

Discipline	Topic of the training
Agronomy(ONC)	Integrated Nutrient Management
	Use of organic input
	Integrated Crop management
	Water management
	Weed management
	Use of plastic mulch in farming practices
	Importance of Organic farming
	Importance of balance fertilizer
Women in Agriculture(ONC)	Nutritional garden
	Value addition
	Income generation activities for empowerment of rural women
	Rural crafts
	Women and child care
	Location specific drudgery reduction technologies
	Design and development of high nutrient efficiency diet
	Development of safe grain storage structure
	Small scale processing & packaging
Capacity building(ONC)	Leadership development
	Group dynamics

	Formation and management of SHG's
	Demonstration Technology
	Awareness regarding Organic Farming
	Small scale processing & value addition
Plant Protection (ONC)	Training on "Mushroom production technology
	Training on Spawn production technology
	<i>Trichoderma</i> Mass production and multiply technology
Horticulture(ONC)	Nursery management in vegetable crops
	Role of PGR in cucurbits
	Importance of Micro Nutrient in bulb crops
	Processing and Value addition
Rural Youth(ONC)	Mushroom production
Agronomy (OFC)	Integrated farming
	Production and use of organic input
	Crop Planning
	Integrated Crop Management
	Nursery Management
	Year around Fodder Production
	Use of organic input
	Integrated Crop management
	Water management
	Integrated Farming
	Weed management
Plant Protection (OFC)	Role & methods of seed treatment in crop disease managements.
	Plant Protection Measures for Summer Vegetables
	Identification and Plant protection measures for summer paddy
	Mushroom cultivation technology
	Mushroom Spwan Preparation Tecnology
	Mass production and multiply technology of bio-agents <i>Trichoderma</i>
	Identification and integrated pest and disease management in Kharif paddy crops.
	Identification and integrated pest and disease management in Wheat crops.
	Identification and integrated pest and disease management in Gram crops.
	Identification and integrated pest and disease management in Rabi vegetables crops.
	Preparation technology of ecofriendly bio-pesticides i.e. NSKE and NPV.
Women In Agriculture (OFC)	Location specific drudgery reduction technologies
	Design and development of high nutrient efficiency diet
	Design and development of low nutrient efficiency diet
	Safe drinking water
	Layout of Kitchen garden
	Child Care
Horticulture (OFC)	Production technology of Chrysanthemum
	Plant Propagation techniques in Ber
	Agro techniques of chilli
	Production technology of cole crops
	Production technology of cucurbits
	Micro irrigation system in horticultural crops

Details of Vocational training programmes for Rural Youth to be conducted by the KVKs

Training title	Crop / Enterprise	Identified Thrust Area	Duration of training (days)
Training on "Mushroom production technology	Enterprise	Rural Youth & SHG	07
Training on Spawn production	Enterprise	Rural Youth & SHG	07
<i>Trichoderma</i> Mass production and multiply technology	Enterprise	Rural Youth & SHG	05
Fabric painting , Embroidery, Printing of Clothes ,Dying of clothes.	Enterprise	Women Empowerment	07
Drafting ,cutting & sewing of children & Ladies Garment	Enterprise	Women Empowerment	15
Training on value addition of fruits/vegetables	Enterprise	Women Empowerment	07
Training on value addition of Mushroom	Enterprise	Women Empowerment	05
Seed production technology in different crop	Crop	Rural youth	05
Establishment of commercial nursery	Horticultural Crops	Rural youth	05

Other EXTENSION ACTIVITIES

Activity	No. of activities (Targeted)
Field Day	05
Kisan Mela	02
Kisan Ghosthi	05
Exhibition	04
Film Show	20
Method Demonstrations	10
Farmers Seminar	03
Workshop	01
Group meetings	08
Lectures delivered as resource persons	50
Newspaper coverage	80
Radio talks	24
TV talks	03
Popular Articles	20
Extension Literature	09
Farm Advisory Services	80
Scientific visit to farmers field	50
Farmers Visit to KVK	150
Diagnostic Visits	05
Exposure Visits	01
Ex-trainees Sammelan	01
Soil Health Camp	02
Animal Health Camp	01
Agri Mobile Clinic	-
Soil Test Campaigns	01
Farm Science Club conveners meet	04
Self Help Group conveners meetings	04

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

Name of the Product	Qty	Amount (Rs.)		Remarks
		Cost of inputs	Gross income	
Mushroom Production	44 kg	2000	3500	
Mushroom Spawn	50 kg	2500	4000	
Mushroom Bags	85 Bags	1500	2500	
Bio-agents	40kg	1500	4,000	For Demonstration , FLD & OFT
BIOFERTILIZERS Vermicompost	15q	4000	15000	
BIO- PESTICIDES	50 lt	1500	-	For Demonstration , FLD & OFT

Livestock and fisheries production

Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
	Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
Cattle Cow	HF	Milk	11000 l		2,75,000	
Fisheries	Rohu, Katala	Fresh fish	1500 kg		150000	

Details of soil & water samples analyzed so far :

Type	No. of Samples	No. of Farmers	No. of Villages	Amount released	Resources to be generated
Soil Sample	40	40	10	4000	8000