

Action Plan 2018 - 19



KRISHI VIGYAN KENDRA BHADRAK

At/PO: Ranital, Dist: Bhadrak,
Odisha, PIN: 756 111

Phone/Fax: +91 6784 265825

Mail ID: kvkbhadrak.ouat@gmail.com

kvkbhadrak.od@gov.in

www.kvkbhadrak.org

1. Name of the KVK : **KRISHI VIGYAN KENDRA BHADRAK**
 Name of host organization : Odisha University of Agriculture and Technology

2. **Training programmes to be organized (April 2018 to March 2019)**

(a) Farmers and Farm women

Thematic Area	Title	No of training	Duration	On / Off campus	No of participants					
					SC	ST	Others	M	F	Total *
I Crop Production										
Production technology	Nursery management and transplantation technique in paddy	2	2	On	5	0	55	60	0	60
INM	Irrigation and INM in transplanted rice	1	1	On	2	1	27	25	5	30
Production technology	Fertilizer management and other intercultural operations in black gram & green gram	2	2	On	5		55	60	0	60
Production technology	Advances in sunflower production technology	1	1	Off	5	--	15	30	0	30
Crop planning	Crop planning in LI command areas	2	2	off	10		50	44	16	60
Total		8	8		27	1	202	219	21	240
II Horticulture										
Production and Management technology	Minisett techniques for production of Elephant foot yam	1	1	On	5		25	25	5	30
IFS	Integration of high value horticultural crops in pond based	2	2	On	8	2	50	52	8	60
Production and Management technology	Off season cauliflower cultivation for higher income	1	1	Off	0	0	30	28	2	30
IPM	Weed management in onion and potato	2	2	Off	12	3	45	60	0	60
Production and Management technology	Scientific cultivation of Colocasia	1	1	Off	0	0	30	30	0	30
Production and Management technology	Production technique of triple disease resistant tomato variety	1	1	On	2		28	25	5	30
IPM	Biopesticides for nematode management in horticultural crops	1	1	Off	0	0	30	30	0	30
INM	Micronutrient formulation for enhancing	1	1	On	0	0	30	30	0	30

	production in vegetable crops									
Production and Management technology	Techniques for trellis system in bittergourd	1	1	Off	0	0	30	30	0	30
Total		11	11		27	5	298	310	20	330
III Soil Health and Fertility Management										
Vermicomposting	Summer management for vermiculture to enhance compost production	1	1	On	0	0	30	30	0	30
Nutrient Management/Feed Management	Production technology for raising Azolla nursery and its multidimensional use	2	2	Off	3	0	57	55	5	60
Vermicomposting	Vermicomposting	3	3	On	3	0	87	80	10	90
Soil Management	Management of saline soil for Rabi season	1	1	Off	0	0	30	30	0	30
Micro nutrient deficiency in crops	Management of Micronutrient deficiencies in cauliflower	1	2	On	0	0	30	30	0	30
IPM	IPM for BPH management in rice	1	1	On	0	0	30	30	0	30
INM	Use of biofertiliser in vegetable crops	1	1	Off	0	0	30	30	0	30
INM	Nutrient management in rice blackgram paira cropping system	1	1	Off	0	0	30	30	0	30
Total		11	12		6		324	315	15	330
IV Livestock Production and Management										
Feed management	Low cost feed management for dairy cows	2	4	On	5	2	53	55	5	60
Disease Management	Management of Mastitis and FMD in cows	1	1	Off	2	0	28	25	5	30
Feed management	Ration planning for dairy cows	2	4	On	4	0	56	50	10	60
Disease Management	Disease management in dairy cows in rainy season with special reference to vaccination	1	1	Off	0	0	30	30	0	30
Feed management	Feed management in goats for faster growth	1	1	Off	4	1	25	26	4	30

Poultry	Brooding and feeding management in chicks	1	1	On	5	2	23	20	10	30
LPM	Care and management of heifers, pregnant cows and new born animals	1	1	Off	0	0	30	25	5	30
Value addition	Paneer making for value addition in milk	1	1	On	0	0	30	20	10	30
Feed Management	UMMB preparation and feeding practices in dairy cows	1	1	On	0	0	30	20	10	30
Total		11	15		20	5	305	271	59	330
VI Fisheries										
Pond Management	Pre stocking management in nursery and grow-out tanks	1	1	Off	4	1	25	30	0	30
IFS	Fish cum Horticulture system for higher profitability in small ponds	1	1	On	5	0	25	30	0	30
Pond Management	Post-stocking management in nursery and grow-out tanks	1	1	Off	5	0	25	30	0	30
Seed production technology	Fish Seed Production Technology in Small ponds	2	2	Off	5	0	55	60	0	60
Feed nutrition	Use of "Farm made fish feed" by utilizing locally available plant feed stuffs and chemical additives	1	1	Off	4	0	26	30	0	30
IDM	Prophylaxis and Fish disease control in Pisciculture tanks	2	2	On	5	0	55	60	0	60
Multiple cropping pattern	Multiple cropping pattern in pisciculture	2	2	Off	5	0	55	60	0	60
Fish production technology	Adverse aquatic environmental conditions and its remedial measures	1	1	On	4	0	26	30	0	30
INM and IDM	Use of chemicals (medicines, growth promoters) and probiotics in aquaculture	1	1	Off	4	0	26	30	0	30

Total		12	12		41	1	318	360		360
VIII Agroforestry										
Agroforestry	Silvicultural operations of Acacia spp	1	1	On	0	0	30	30	0	30
	Propagation technology of teak stumps from seedlings	1	1	On	5		25	30	0	30
	Package of practices of Mangium plants	1	1	Off	0	0	30	30	0	30
	Vegetative Propagation of Bamboo	1	1	Off	5		25	30	0	30
	Multistoried cropping system for better income	1	1	On	0		30	30	0	30
	Shelterbelt plantation technology in coastal areas	1	1	Off	3		27	30	0	30
Total		6	6		13		167	180		180

(b) Rural youths

Thematic Area	Title	No of courses	Duration	On/Off campus	No of participants					
					SC	ST	Others	M	F	Total*
Soil Sc.										
Soil testing	Method of soil sampling, analysis and interpretation of results	1	5	On	0	0	20	20	0	20
Vermicomposting	Methods of Vermicomposting and vermin wash production	2	10	On	5	0	35	40	0	40
Horticulture										
Production and Management	Quality planting material production of tube rose	1	3	On	0	0	20	20	0	20
	Seed production technique in tomato	1	3	On	0	0	20	20	0	20
Animal Sc.										
LPM(Poultry)	Intensive, semi intensive and backyard poultry farming	1	3	On	4	0	16	20	0	20
LPM (Goatery)	Goat farming practices for higher income generation	1	3	On	4	0	16	20	0	20
Value addition	Value addition in milk for sustainable and profitable dairy farming higher profitability	1	3	On	0	0	20	20	0	20
Fishery										
Seed production	Quality seed production technology (Fry , fingerlings, advance fingerlings) of	1	3	On	0	0	20	20	0	20

	Indian Major carps									
Composite fish farming	Year round sustainable yearlings/Stunted fingerlings production techniques	1	3	On	4	0	16	20	0	20
Entrepreneurship Development	Entrepreneurship development in Pisciculture	1	1	On	5		15	20		20
Others										
Group dynamics	Formation and management of FPO	1	1	On	2	0	18	20		20
Total		12	38		24		21 6	24 0		240

(c) Extension functionaries

Thematic Area	Title	No of courses	Duration	On/Off	No of participants					
					SC	ST	Others	M	F	Total *
Crop Production										
Production Technology	Season long training on production technology on mechanical transplanted rice	1	5	On	2	--	18	20	0	20
	Use and maintenance of farm machineries	1	3	On	2	--	18	20	0	20
Soil Sc.										
INM	Nutrient management through Soil Health Card and its interpretation	1	2	On	0	0	20	20	0	20
	New generation fertilizer for highest nutrient use efficiently	1	2	On	0	0	20	20	0	20
Horticulture										
Production Tech	Production techniques of high value horticultural crops under low cost poly house	1	2	On	0	0	20	20	0	20
IPM	Techniques for microbial growth promoter and seed borne fungal disease suppressor	1	2	On	0	0	20	20	0	20
Fishery Sc.										
Aquaculture	Recent advances in freshwater aquaculture technologies	1	2	On	2	0	18	20	0	20
Animal Sc.										
LPM	Advances in management of Mastitis in dairy	1	2	On	0	0	20	20	0	20
	Ethnoveterinary medication	1	2	On	0	0	20	20	0	20
Total		9	22		6		174	180		180

Skill Development training (ASCI)

Thematic Area	Title	No of courses	Duration	On/Off	No of participants					
					SC	ST	Others	M	F	Total *
I Crop Production										
Seed production	Seed production	1	200 hrs	On	2	--	28	30	0	30
II Fishery Sc.										
Aquaculture	Aquaculture	1	200 hrs	On	3	0	27	30	0	30
Total		2	400 hrs		5		55	60		60

3. Frontline Demonstration

I.Crop

Crop	Season	Title	Technology	No. of Demo	Area (ha)
Rice	Kharif 2018	FLD1: Integrated crop management in Direct seeded rice	Line sowing using seed cum fertilizer drill +Basal fertilizer Post emergent application of Bispyribac sodium 10% SC@200 ml/ha at 15-20 DAS STBFR	30	8
Rice	Kharif 2018	FLD2: Salt tolerant variety Luna Sampad	Luna Sampad (Transplanted rice) STBFR	10	2
Rice	Kharif 2018	FLD3: IPM module for the management of BPH/WBPH in rice	Skip row planting (after 3 m), installation of spider trap @ 25/ ha. Need based alternate spraying (based on ETL) of Flonicamid 150 g/ ha and Buprofenzin @ 750 ml/ ha	30	10
Blackgram	Rabi 2018-19	FLD4: Blackgram as paira crop for intensification of rice-fallow	Blackgram (var. PU 35) Rice fallow technology	50	20
Blackgram	Rabi 2018-19	FLD5: Nutrient management in rice-blackgram paira cropping system	RDF (80:40:40) to rice in kharif NPK 20:40:20 to paira blackgram	20	5
Vegetables	Kharif 2018	FLD6: High valued horticultural crops on pond based farming system	Banana (Gaja bantala)+Papaya (Coorg honey dew)+ Elephant foot yam (Gajendra) + Yam (Odisha elite)	10	1
Okra	Rabi 2018-19	FLD7: Bioregulator application in okra for yield enhancement	Seed treatment with 500 ppm thiourea+ foliar application of thiourea at 20 and 40 DAS and basal application of zinc @ 5 kg ha-1 +RDF	10	1
Spine gourd	Rabi 2018-19	FLD8: Spine gourd var. Arka Neelachal Shanti	Var. Arka Neelachal shanti	10	1

II. Enterprise

Enterprise	Season	Title	Technology	No. of Demo	Area (ha)/nos
Vermicompost	Year round 2018-19	FLD 9: Vermicompost using available farm resources	Partial decomposition of plant residues and cow dung (4:1) up to 45 days + Vermicomposting	20	
Fish	Kharif 2018	FLD 10: Raising of carp fry to stunted fingerlings and yearlings	Stocking of small ponds (0.06-0.12 ha size) with catla: rohu: mrigal fry :: 0.9:1.2:0.9 Lakhs per ha. Respectively	10	1.5
Fish	Kharif 2018	FLD 11: "CIFA- Carp Starter - II feed" for rearing carp fry to fingerlings	Feeding with "Carp Starter - II" to fry at a feeding rate 10%, 8% and 6% of total biomass daily in 1 st , 2 nd and 3 rd month respectively	3	0.6
Fish	Rabi 2018-19	FLD 12: 'Jayanti rohu'(CIFA-IR) in lieu of traditional rohu in 3-species IMC culture	Stocking of grow-out ponds with catla: Jayanti rohu: mrigal fingerlings: 3000:4000:3000 nos. per ha. Respectively	5	0.5
Dairy	Year round 2018-19	FLD 13: Fodder and Azolla for feed management in milch cows	Azolla production in nursery tanks (6 x 9 ft ²) Hybrid nappier (CO 4) planting 60cmX60cm	15	0.5
Dairy	Rabi 2018-19	FLD 14: UMMB feeding in cows to increase the milk yield	UMM Block: Mollases: 39%, Wheat bran: 20%, Rice polish: 20%, Urea: 10%, Lime: 6%, Salt: 5%; 200g/day per cow regularly	15	15 cows
Poultry	Rabi 2018-19	FLD 15: Rainbow rooster/Kegg in backyard system	Rainbow rooster/ Kegg (Brooding, vaccination and feeding of chicks upto 21 days)	20	300 chicks
Poultry	Rabi 2018-19	FLD 16: Khaki Campbell duck in ponds for income generation	Khaki Campbell duck (Brooding, vaccination and feed management)	20	300 ducklings

4. Seed and planting material production

Seed		Planting material	
Crop	Area/No	Crop	Area/No
Rice Var CR 1009 Sub-1	6.0 ha	Tomato seedlings	10000 nos.
Rice Var Kalachampa	4.0 ha	Brinjal seedlings	5000 nos.
Rice Total	10.0 ha	Chilli	5000 nos.
Fishery/Animal Sc.		Knol khol	3000 nos.
Staunted YL	60,000	Cabbage	5000
Spawns	35 lakhs	Cauliflower	5000
Juveniles	6000	Bhima Super Onion	5000
Brooded chicks	500	Forest plant (Teak, Mangium, Acacia, Mahogany etc.)	8500

Vermi		Mushroom	
Vermicompost	30 q	Mushroom spawn production	1000 bottles
Vericulture	10 kg		

5. Extension Activities

Activity	N	B
Field Day	14	720
RE meeting	12	360
SAC meeting	1	30
Technological Week	1	300
Farmers Visit to KVK	1500	1500
Diagnostic Visits	40	80
Ex-trainees Sammelan	4	100
Soil Health Campaign	2	200
Animal Health Camp	6	1200
Seed treatment campaign	2	100
SHG conveners meetings	2	100
Celebration of Special days	5	200
Farmer scientist interaction	3	300
Awareness campaign	4	200
Method Demonstration	10	250
Publication	8	-
Radio talk	12	-
TV talk	6	-

6. Revolving Fund

Open balance as on 1 st april 2018 (Rs. In lakh)	Amount to be invested (Rs. In Lakh)	Return (Rs. In Lakhs)
45,450	4.5	7

7. Expected fund utilization

Project	Source	Amount to be received (Rs. In lakh)
Technology transfer	ATMA	2.00

8. On-Farm Trials to be conducted (10 nos)

Thematic area	Title	Treatments	No. of farmers
OFT-1: Agronomic practice	Assessment of rice varieties for BPH tolerance	FP : Swarna TO1: Reeta (NRRI, 2011) TO2: CR Dhan 300 (NRRI, 2012) TO3: Hasanta (OUAT, 2014) (Transplanted rice with STBFR for all treatments)	7
OFT-2: Nutrient Management	Assessment of nutrient supplementation through foliar applications in green gram	FP : NPK 20:40:20 TO1: FP+2 Foliar application of DAP(2%) at 30 & 45 DAS (Planting at Jan 3 rd week, line sowing) TO2: FP+2 Foliar spray of Urea (2%) at 30 & 45 DAS TO3: FP+2 Foliar sprays of 18-18-18 WSF (1%) at 30 & 45 DAS	5
OFT-3: Nutrient management	Assessment of rate and schedule of fertilizer application in sunflower	FP :Full dose of NPK 60:90:60 as basal TO1:NPK 60:90:60 kg/ha with 3 splits of N; 50% + 25% + 25% (State recommendation) TO2:NPK 60:90:30 with 3 splits of N; 50% + 25% + 25% (DOR recommendation) TO3:NPK 90:90:60 with 2 splits of N, 60% + 40% (OUAT recommendation)	5
OFT-4: IPM	Assessment of IPM strategy for the management of major insect pest of rice	FP : Chloropyriphos + Cypermethrin @ 1 l/ha TO ₁ : Nursery treatment with fipronil 0.3 G + Chlorantraniliprole 0.4 G @10kg/ha at 30 DAT + need based spraying of Ethiprole + imidacloprid TO ₂ : Nursery treatment with fipronil 0.3 G + Pheromone trap installation for pest monitoring + release of <i>Trichogramma japonicum</i> @ 50,000/ha six + Bt spray @ 1 kg/ha at evening hours at 30 & 50 DAT + neem oil spray 0.15% (1500 ppm) @ 3ml/lit at 65 DAT + need based spraying of pesticides (Ethiprole + imidacloprid) based on pest severity (e.g. SB/BPH).).	5
OFT-5: Nutrient management	Assessment of microbial consortia in Chilli	FP :RDF+No use of biofertilizer and micronutrients TO1:RDF+Arka Microbial Consortia TO2:RDF+OUAT formulation @ Azospirillum:PSB: Azotobacter:: (4:4:4 Kg)/ha	13
OFT-6: Varietal evaluation	Assessment of tomato hybrids in rice-tomato cropping system	FP: Avinash TO 1: Arka Samrat TO 2 : Arka Rakshak	12
OFT-7: LPM	Assessment of low cost farm made feed formulations for cost effective milk production in cows	FP : Commercial feed @ 3-4kg/day TO ₁ :Low cost farm made feeding @ 3-4kg/day (maize-40% , GNOC-25%, DORB 20%, wheat bran/chuni 10%, Mineral mix and Salt 5%) TO ₂ : Low cost farm made feeding @ 3-4kg/day (Maize-30, broken rice 10%, GNOC-20%, MOC-5% DORB 20%, wheat bran/chuni 10%, Mineral mix and Salt 5%)	6
OFT-8: LPM	Assessment of concentrate and mineral mixture supplementation on body weight gain in goats	FP :Browsing and occasional house hold feeding TO1:Browsing + Concentrate @100g/adult goat TO2:Browsing + Mineral mixture @10g/adult goat TO3: Browsing + Concentrate+ Mineral mixture (Deworming in all treatments, selection of 3months old goats)	10
OFT -9: Fish diseaseManag ement	Assessment of Ivermectin 2% w/w in controlling Argulosis	FP :Use of inorganic pyrethroid pesticides TO ₁ : Application of 'Paracure I.V. '(Ivermectin 2% w/w) @ 250g/1 ton of traditional fish feed and fed to fishes 3-5% of body wt. daily for 4 days to control Argulosis	5

		TO ₂ : Application of Paracure BT (Ivermectin 2%w/v) @ 200ml/acre-m in fish ponds	
OFT-10: Varietal Evaluation	Assessment of incorporation of Amur carp in composite carp culture for maximizing fish production	FP :Mrigal as bottom feeder with stocking rate of more than 30% TO ₁ : Stocking ratio catla: rohu : mrigal :Amur carp :: 30:40:20:10 TO ₂ : Stocking ratio catla: rohu : mrigal :Amur carp :: 30:40:15:15 TO ₃ : Stocking ratio catla: rohu : mrigal :Amur carp :: 30:40:10:20	5

9. List of Projects to be implemented

Name of the project	Fund expected (Rs.)
Pulse Seed hub	6000000
C-FLD on oilseed and pulses	500000
IRRI Head to Head trial	35000
ATMA-KVK Convergence	200000

-Seed Hub Project

Crop	Season	Variety	Target production, q
Greengram	Summer	IPM 2-14	600
Blackgram	Summer	PU 31	300
Total			900

-Cluster FLD on Oilseeds and pulse

Crop	Season	Target area (ha)
Sunflower	Rabi	30
Greengram	Summer	50
Total		80

10. No. of success stories to be developed: 8

- a) Success stories on CFLD on oilseeds and pulses: 03
- b) Success story on dairy farming: 01
- c) Success story on Goat farming: 01
- d) Success story on Fish farming: 01
- e) Success story on Integrated farming: 01
- f) Success story on an entrepreneur: 01

11. Scientific Advisory Committee

Date of SAC meeting held during 2017-18	Proposed date
28.2.18	23.08.18

12. Soil and water testing

Sample	No. of samples to be analysed
Soil	1000
Water	200

13. Staff position

Sanctioned	In position	If vacant, since when
Sr. Scientist	1	0
Scientist (Agronomy)	0	1 (2015)
Scientist (Soil Sc)	1	0
Scientist (Hort)	1	0
Scientist (Fishery Sc)	1	0
Scientist (Animal Sc)	1	0
Scientist (Home Sc)	0	1, (17.05.18)
Programme Assistant (Computer)	1	0
Programme Assistant (Forestry)	1	0
Farm Manager	1	0
Assistant	0	1 (14.05.18)
Stenographer, Grade - III	1	0
Driver/ T-2	1	0
Driver / T-2	1	0
Skilled Supporting Staff	1	0
Skilled Supporting Staff (Cook)	1	0
Total	13	3

14. Status of infrastructure

Infrastructure	Complete	Under construction	Not started	Reasons, if not started
Administrative building		-	✓	Not sanctioned
Trainees' hostel	Completed	-		
Staff quarter		-	✓	Not sanctioned
Demonstrations:				
i) IFS		-	-	-
ii) Portable Carp Hatchery	Completed	-	-	-
iii) Goatary		-	✓	-
iv) Seed processing plant	Completed			

15. Fund requirement and expenditure (Rs.)

Total Fund Requirement:

	Expenditure (last year) (Rs. in lakh)	Expected requirement (Rs. in lakh)
Recurring		
i. Pay & allowance	89.2	99.9
ii. Contingency	11.58	15.0
iii. TA	1.6	1.60
iv. HRD	0	0.10
Non-recurring (specify)		
i. Works (Road, threshing floor, drying yard, vehicle and implement shed, irrigation system etc.)	--	15.0
iv. Furniture & Equipment	3.0	
v. Vehicle and tractor	0	19.0
TOTAL		150.6

Doubling Farmers` income modules (3rd Year Interventions)

2018-19

Module	Farminng Situation	Intervention
Module I Thaila, Solagaon	Irrigated shallow low land (Canal in kharif, no irrigation in rabi)	<ul style="list-style-type: none"> • Line sowing/ Mechanical transplanted rice • Herbicide: Bispyribac Na+ Hand weeding • STBF • Rice fallow intensification: Greengram/blackgram with NPK 20-40-20
	Small tanks (5-30 cent)	Fry+stunted fingerlings and yearlings production
	Pond dykes	Banana+ Papaya (Coorg Honeydew)+Elephant foot yam (Gajendra)+ Yam
		Vermicomposting (Unit size:12x4x3 ft)
	Homestead	Hybrid nappier /Paragrass Azolla production Farm made feed , Value addition
Module II Kuanrda, Orali	Rainfed lowland	<ul style="list-style-type: none"> • Line sowing • Herbicide: Bispyribac Na+ Hand weeding • STBF • Greengram/blackgram with NPK 20-40-20
	Homestead	Hybrid nappier /Paragrass Azolla production
	Homestead	Rainbow rooster in 2 batches/yr
	Homestead	Paddy straw Mushroom (3 beds/day) June – Nov.
	Homestead	Oyster mushroom, 2beds/day, Dec-Feb
Module III Junuda	Rainfed shallow submerged land	<ul style="list-style-type: none"> • HYV Luna Sampada • Line sowing • STBF
	Rainfed shallow submerged land	Blackgram as paira (var. PU 31) NPK 20-40-20
	Homestead	Hybrid nappier /Paragrass, Farm made feed, Value addition of milk (50%)for <i>chhena</i> making
	Homestead	Pallishree poultry (2 batches of 20 birds each)
	Homestead	Paddy straw mushroom, 3 beds per day

Sr Scientist & Head