

PROCEEDINGS OF THE 18TH SCIENTIFIC ADVISORY COMMITTEE MEETING

KRISHI VIGYAN KENDRA, BOUDH

The 18th Scientific Advisory Committee (SAC) both online and offline meeting of KVK, Boudh was held on Dt11.01.2022 at 10.30 AM in KVK training hall under the Chairmanship of Dean Extension Education, OUAT, Bhubaneswar Dr. P. J. Mishra & Dr. K .S. Das, Principal Scientist, ATARI, Kolkata, Dr. Govinda Acharya, OIC & Head, CHES, Dr. Amresh Khuntia, JDE,OUAT, Bhubaneswar and Sri. Baikuntha Charan Sahoo, Chief District Agriculture Officer, Boudh participated in the SAC meeting. Members present in the meeting are annexed herewith. Sj.Tapan Kumar Das, Senior Scientist & Head, KVK, Boudh made a brief welcome to the SAC members and requested the dignitaries to inaugurate the meeting by lightening the lamp and requested the Chairman to conduct the meeting.

After a brief introductory remark, the Chairman asked the Sr. Scientist & Head to start the proceedings as per the agenda.

Agenda-1 Approval of the proceedings of last SAC meeting

The Sr. Scientist & Head briefly presented the proceedings of the last SAC meeting. The Chairman taking the consent of the members approved the proceedings.

Agenda-2 Action taken on the proceedings of last SAC meeting

The Sr. Scientist & Head presented the following action taken report on the recommendations of last SAC meeting held on Dt. 05.02.2021.

Recommendations	Action Taken
Popularization of Agri-silvicultural model through KVK by live demonstration units at the crop cafeteria	➤ One Agri – Silviculture model has been developed in the Agro-forestry unit of crop cafeteria.
Increase soil health card targets for each KVK to be achieved	➤ Awareness programme on soil health management & soil testing conducted in collaboration with Agriculture dept. at different villages of the district. ➤ Celebrated World Soil Day in collaboration with Agriculture dept, Boudh and Soil Health Card distributed to 50nos. of farmers
Short duration & drought tolerant Rice variety to be Promoted.	➤ Droughts tolerant paddy variety Swarna Shreya has been taken in FLD as short duration paddy crop (Duration: 120 days) ➤ Bio-fertilized paddy variety CR-310 &

	311 has taken in OFT during Kharif-2021.
The capacity of poultry unit to be increased and popularization of different improved poultry breeds.	<ul style="list-style-type: none"> ➤ The capacity of poultry unit has been increased upto 2000 chicks. Breeds like Kalinga Brown, polyshree, Kadaknath are has been provided to the SC Farmers under SCSP programme at village:Lundrujhore,Tentulipadar, Dhalpur
Non-paddy crop to be promoted in the district as crop diversification	<ul style="list-style-type: none"> ➤ Crop Such as Groundnut ,Greengram , Pigeonpea , Mustard (Oilseed & Pulses) has been taken in cluster demonstration Programme as crop diversification under different blocks of Boudh during Kharif & Rabi 2021-22. ➤ 1 no. of training conducted for awareness of farmer on crop diversification at village purnakatak including 30 nos. of F/FW. ➤ 1 no. of OFT on Sweet corn & 1no. of FLD on Cotton crop has been taken during Kharif-2021 at village Badhigaon, purnakatak as crop.
Importance to be given on Late kharif onion.	<ul style="list-style-type: none"> ➤ Training programme on Cultivation of Kharif Onion conducted at Boudh, Kantamal & Harbhanga blocks in collaboration with Agriculture & Horticulture department at Lambokani , Rampur village of Boudh District. <p>Title : Assessment of Onion Varieties of Kharif Season</p>
Potential HY varieties of Okra to be popularized	<ul style="list-style-type: none"> ➤ 2nos.of F/FW training programme has been conducted at village Rampur & Kalapathar on popularization of HY Okra variety Arka Niketan including 50 nos. of Farmer.
More focus is to be given to onion crops due to its feasibility and quality.	<ul style="list-style-type: none"> ➤ One OFT on Assessment of Onion varieties such as Bhima Super & Arka Niketan has been conducted during Kharif- 2021 at village -Ereda and Rampur
Nutri-garden with Nutrional calendar may be developed at KVK Farm mentioning types of suitable vegetables and time of sowing.	<ul style="list-style-type: none"> ➤ Nutri-garden model with different vegetable types & sowing time has been developed in the crop cafeteria. 300 nos of vegetable seed kits has been distributed to different SHG groups and AWW of village-tutusingha, kanakpur, lundaberuni, ereda etc.

Popularization of vermi compost and Azolla production	<ul style="list-style-type: none"> ➤ Training cum demonstration program was organized for the production of good quality vermi compost and Azolla at village Tetelenga of Boudh block including 100 farmers. HDPE beds and Azolla beds distributed among the farmers under SCSP programme.
Production of Organic Vegetables to be promoted in KVK Farm	<ul style="list-style-type: none"> ➤ Different vegetables such as Brinjal, Tomato, Chilli, Broccoli, Cabbage, Cauliflower, bittergourd, Onion etc has been grown in Organic way in the crop cafeteria as a demo unit . ➤ 1 no. of training has been conducted at village Khuntiapada on Organic Farming
Awareness on vegetable nursery raising technique.	<ul style="list-style-type: none"> ➤ Training cum demonstration programme has been imparted by KVK among the SHGs members for capacity building.
Promote large scale production of Mushroom production.	<ul style="list-style-type: none"> ➤ 3 nos. of RY and F&FW trainings cum demonstration programme conducted involving 75 nos. trainees at Kirla, Badhigaon, Gaundisara village. ➤ 2 demonstrations on paddy straw mushroom and Oyster mushroom using threshed straw have been conducted. Training manual also provided
Popularization of Bee Keeping.	<ul style="list-style-type: none"> ➤ 10 Nos. of bee box unit has been developed at KVK Farm. ➤ Awareness cum training programme on rearing honey bee covering 50 nos. of participants.
Popularization of Backyard Poultry and different improved Poultry breeds.	<ul style="list-style-type: none"> ➤ Poultry breeds like Kadaknath, Kalinga brown, Banaraj chicks of 21 days provided to 150 nos of beneficiaries for backyard poultry rearing at village Lundrujhor, Tetulipadar, Dhalpur under SCSP Programme.
Emphasis should be given on convergence activities with line department.	<ul style="list-style-type: none"> ➤ CFLD programme on Ground nut(var. Devi) has been conducted in collaboration with Agril. Dept. At Purnakatak, Harbhanga block and Khuntiapada village, Boudh block involving 25 nos. of farmers. ➤ Demonstration programme on Arhar variety PRG-176 has been conducted in collaboration with Agriculture dept. at Manamunda and Khatkhatia village of Kantamal block involving 30 nos. of farmers.

Agenda-3 Achievements made during: Rabi 2020-21

The Senior Scientist and Head presented the overall achievements made by the KVK during Rabi 2020-21.

On-Farm Testing

Four numbers of OFTs have been conducted during Rabi- 2020-21 involving 28 farmers based on problem of farmers. Some of salient achievements of the OFTs were as follows:

In OFT on “Assessment of Application of growth regulator in chilli” application of growth regulator in chilly as treatment 1 Spray Triocontanol @ 1.25 ml/lit at 20,40,60 and 80 days of planting. Spray NAA @ 10 PPM (10 mg/lit of water) on 60 and 90 days after planting to increase fruit set recorded 106 q/ha & 114 q/ha yield respectively as compared to 92 q/ha yield in Farmers Practice.

OFT on “Assessment of insecticides for management of rice stem borer” Nursery treatment + granular application of chlorantraniliprole 0.4 G @ 10kg/ha at 30 DAT + Cartap hydrochloride 50 SP @ 750 g/ha at 50 DAT as treatment 1 and T O 1 + Rynaxypyr 20 SC @ 150 ML/ha as treatment 2 recorded 54.3 q/ha yield as compared to 43.50 q/ha yield in Farmers Practice and 58.47 q/ha in treatment 2.

OFT on “Assessment of Efficacy of fungicides against purple blotch in Onion in upland irrigated during Rabi season” Seed treatment with Vitavax power @ 0.2 % along with foliar application of Tebuconazol 25 EC @ 1 ML /Lit recorded 144.6 q/ha yield as compared to 74.9 q/ha yield in Farmers Practice and Seed treatment with Vitavax power @ 0.2 % along with foliar application of Azoxystrobin 23 SC @ I ML/Lit gives 140.6 q/ha yield.

OFT on “Assessment of different planting time for better market price of Tomato” Planting of seedling 30 days before onset of normal planting period recorded 326.2 q/ha yields as compared to 309.4 q/ha yield in Farmers Practice and planting of seedling 15 days after onset of normal planting period gives 314.8 q/ha yield.

Front Line Demonstration

K.V.K conducted 03 nos. of frontline demonstrations during Rabi-2020-21. Salient achievements of some FLDs were given below.

“Demonstration on Weed Management in Rabi Onion.” Pre – emergence application of Pendimethalin @ 0.2 % or oxyflurofen + one hand weeding at 40 to 60 DAT gave yield of 237.2 q/ha as compared to 181.3 q/ha in Farmers Practice which is 30.8% change in yield.

Demonstration on “Demonstration on Triple disease resistant tomato hybrid Arka Rakshak during Rabi Season” gave yield of 421.9q/ha as compared to 359.4 q/ha in Farmers Practice which is 17.27 % change in yield.

Demonstration on “Demonstration on IDM Package for Pumpkin” Seed treatment with Carbendazim 12 % + Mancozeb 63% @ 3g/kg drenching of captan 70% + Hexaconazole 5 % WP @ 0.1 % AT 15 Days after germination. Spray with Imidacloprid 17.8 SL @ 7.5 ML/151 + Neem oil @ 0.2 % at 25 days after germination. Spray of captan 70 % + Hexaconazole 5 % WP @ 0.1 % at 35 days after germination. Application of fosetyl- Al @ 0.1 % at 45 days after germination gave yield of 244.2 q/ha as compared to 182.6 q/ha in Farmers Practice which is 25.2% change in yield..

Agenda- 4 Achievements made during: Kharif- 2021-22

The Senior Scientist and Head presented the overall achievements made by the KVK during Kharif-2021.

On-Farm Testing

Four numbers of OFTs have been conducted during Kharif- 2021 involving 28 farmers based on problem of farmers. Some of salient achievements of the OFTs were as follows:

In OFT on “Assessment of different Sweet corn varieties in upland Rainfed condition.” where Variety- VL Sweet corn 1(FSCH18) gave 88.4 q/ha yield as compared to 68.8 q/ha in Farmers Practice and Variety-Pusa Super Sweet corn-1 gave 92.6 q/ha.

OFT on “Assessment of biofortified rice varieties for nutritional security where Rice variety CR-Dhan-310 recorded 40.2q/ha yield as compared to 33.2 q/ha in Farmers Practice and 37.5 q/ha in rice var. CR-Dhan-311.

OFT on “Assessment of Onion Varieties of Kharif Season where var. Bhima Super recorded 249.28 q/ha yield as compared to 213.85 q/ha in Farmers Practice and 264.0 q/ha in var. Arka Niketan .

OFT on “Assessment of novel insecticides for management of rice stem borer” where Nursery soil treatment with chlorantraniliprole 0.4 G @ 0.4kg/10 cent before 7 days of uprooting of seedling+ application of 0.4G @ 10kg/ha at 20 DAT + Spraying of Cartap hydrochloride 50 SP @ 750 g/ha at 50 DAT recorded 48 q/ha yield as compared to 39 q/ha in Farmers Practice and 49.5q/ha in treatment 2 which is Same as T O₁ except spraying with chlorantraniliprole in place of cartaphydrochloride at 50 DAT.

Front Line Demonstration

K.V.K conducted 07 nos. of frontline demonstrations during Kharif-2021. Salient achievements of some FLDs were given below-

“Demonstration on BPH tolerant high yielding rice variety-Hasanta” gave yield of 42.8 q/ha as compared to 34.4 q/ha in Farmers Practice which is 20.9 % change in yield.

“Demonstration on Aromatic Paddy Variety-Geetanjali in Medium Irrigated land, gave yield of 40.6 q/ha as compared to 32.8 q/ha in Farmers Practice which is 23.7 % change in yield.

Demonstration on drought tolerant paddy Variety Swarna Shreya” where var. Swarna Shreya gave yield of 35.8 q/ha as compared to 31.4 q/ha in Farmers Practice which is 14% change in yield.

Demonstration on” INM in Brinjal.” with Application of N-125 kg, P-50 kg, K-50 kg/ha, 5 kg of Azospirilum & PSB each and Foliar application of Boron @ 2gm/lit of water gave yield of 152.5 q/ha as compared to 119.5 q/ha in Farmers Practice which is 17.77 % change in yield.

Demonstration on “suitable IPM module for YVMV in Okra” with Seed Treatment with Imidacloprid 600 FS @ 5 gm / Kg, Installation of Yellow Sticky Trap @ 50 / ha and spraying Acetamiprid 20 SP @ 0.3 gm / Lit. at 30 and 45 DAS gave yield of 80 q/ha as compared to 66 q/ha in Farmers Practice which is 17.5 % change in yield.

Demonstration on “Integrated management of bacterial wilt in Brinjal” with Seedling root dip in Chloramphenicol @ 200ppm/l+ Soil application of Bleaching powder 15 kg/Ha and drenching

of Streptocycline 0.1 gram+coper oxychlorode 2 gram per lit of water gave yield of 198 q/ha as compared to 162 q/ha in Farmers Practice which is 18.18 % change in yield.

Demonstration on “Integrated pest management on sucking pests in cotton” with Planting of maize as border crop around the field, intercropping of cowpea @ 8:2 ratio application of azadirachtin 0.15% @ 1.5 Lit./ ha twice @ 30 & 45 DAS application of Flonicamid 50% WG @ 175 gm/ha twice at 60 and 70 DAS gave yield of 24.6 q/ha as compared to 19.5 q/ha in Farmers Practice which is 20.7 % change in yield.

Training

KVK imparted training to 1525 farmers & farm women through 61 training programmes, 195 rural youths trained on quality planting material production in vegetable, Bee keeping, Paddy straw & oyster mushroom cultivation, Production of quality planting material under protected condition, entrepreneurship development, value addition of vegetables through 13 Nos. of trainings were conducted during the period and 2 nos. of In-service training.

Other Extension Activities

KVK conducted other extension activities viz. Scientist visit to farmers' fields 95 nos, Farmers visits to KVK 86 nos, 3 Field days, 2 nos. of special swachhata campaign, 15 days of swachhata pakhwada celebration, 10 nos. of farmers Scientist Interaction Programme, 1 no. of awareness campaign on Balanced Use of Fertilizer, 9 nos. of Special. Day celebration, 4 nos. of exhibition and 14 Film shows. Scientists of KVK published 1 no of newsletters, 9 nos. of popular articles, 2 nos. of web-telecast has been conducted. 28 nos. of messages has been sent to 32508 nos. of farmers regarding ICM, INM, IPM, IDM crop management, weather etc. KVKs celebrated Akshaya trutiya, Women in agriculture day, Agriculture Education day, Webinar, etc. during the period.

KVK produced Pigeonpea variety (**BRG-5**) 5.0 qtls at its own farm. KVK produced seedling of Brinjal (JK8031) 3000 nos, Onion (Agri found light red,NHRDF red -3 & 4) 4,00,000 nos, Chilli (Agni) 1,582 nos, Tomato (Arka Rakshyak, Bahubali) 10,000 nos, Papaya(Red lady) 1,025nos, Drumstick (PKM-1) 845 nos. during the year.In case of other material production Mushroom(Paddy straw & Oyster) is 1 qt., Vermicompost 10 qt., Poultry chicks is 1630 in nos. and Honey is 10 kg during the year of 2021-22.

Agenda 5: Action Plan for Rabi 2021-22

There is a plan of conducting 03 nos. of OFTs and 05 FLDs during Rabi -2021-22.

Agenda 6: Suggestions from SAC members

The following action points were suggested by the SAC members.

- Spawn Production to be increased
- Mushroom production to be promoted in convergence mode.
- Early season cabbage, Cauliflower to be introduced.
- Value addition to be promoted
- Training to be organized related to watershed activities.
- Newly HY Onion variety to be included.
- FLD on use of proper Insecticide on cotton to be promoted.
- Awareness on use of fertilizer to be promoted
- Training on different field crops and vegetables at Harbhanga and Kantamal block.
- New HY paddy varieties to be taken in OFT or FLD to replace pooja variety.
- Training to SHG in collaboration with KVK (All agriculture and allied) should be done.
- Food processing to be introduced through KVK.
- Awareness on Onion and watermelon to be introduced through KVK.
- High value vegetables such as Capsicum, Red cabbage, Broccoli to be promoted.
- OFT on use of micro-nutrient in vegetable such as Cauliflower or Tomato.
- Lac to be promoted.
- Awareness on Organic farming and Natural farming.
- Suitable varieties (pulse or oilseed crop) after immediate paddy to be promoted.
- Work in convergence mode for increasing productivity.

The meeting was ended at 2.00 pm with vote of thanks by Smt. S. Priyadarshini, SMS (Agronomy).

**Sr. Scientist & Head
KVK, Boudh**

**JDE
DEE, OUAT**

**Dean Extension Education
OUAT, Bhubaneswar**

List of participants in the Rabi 18th SAC meeting

Sl. No	Name	Designation &Address	Status
1	Dr. P.J.Mishra	Dean Extension Education, OUAT,BBSR	Chairman
2	Dr. Amresh Khuntia	JDE, OUAT,BBSR	Representative of Dean Extension Education,OUAT,BBSR
3	Dr. K.S.Das	Principal Scientist, ATARI, Kolkata	Member
4	Dr. Govinda Acharya	Director, CHES, IIHR, BBSR	Member
	Dr. Rajneesh Mishra	Dy. Director of NHRDF,Boudh	Member
	Sj. Baikuntha Charan Sahoo	CDAO, Boudh	Member
6	Sri Lipsa Pattnaik	O/o DFO,Boudh	Member
7	Sj Pradipta Kr. Mohanty	PD, Watershed	Member
8	Dr. Prafulla Kr. Nayak	SDVO,Boudh	Member (Representative Of CDVO)
9	Sj. Jogendranath Mohapatra	ADH, Boudh	Member
10	Sj. Debadutta Mishra	DPC, OLM Boudh	Member
11	Sj. Gyana Ranjan Acharya	APD, Watershed Boudh	Representative
12	Dr. Narayan Bar	Sr.Scientist & Head, KVK, Kandhamal	Invitee
13	Dr. Jeebanjeet Sen	Sr.Scientist & Head, KVK, Sonepur	Invitee
14	Sri Pradip Dehuri	NGO, Pali vikas parisad, Boudh	Invitee
15	Smt Sobharani Bhoi	Progressive Farmer	Invitee
16	Sri Pradeep Bhanja	Progressive Farmer	Invitee
17	Smt. Anita Swain	Progressive Farmer	Invitee
18	Sri Anil Kumar Purohit	Progressive Farmer	Invitee
	Smt. Pramodini Mahapatra	Progressive Farmer	Invitee
19	Sri Pratap Kr. Mahapatra	Sambad Reporter	Media
20	Sri Srikanta Sahoo	Dharitri Reporter	Media
21	Sri Priyabrata Sahoo	Nakhetra News	Media
22	Sj.Tapan Kr. Das	Sr.Scientist & Head, KVK, Boudh	Member-Secretary