

Proceedings of 22nd Scientific Advisory Committee Meeting

The 22nd Scientific advisory committee meeting of KVK, Kalahandi was held on 25.02.2022 in the office of KVK, Kalahandi under the chairmanship of Prof. Prasannjit Mishra, Dean, DEE, OUAT., Bhubaneswar on virtual mode. The list of members attended the meeting is attached (Annexure-I).

The meeting started with a warm welcome address by Senior Scientist & Head, KVK, Kalahandi followed by a formal inauguration and lightening of the holy lamp by the dignitaries present in the meeting. Later the Chairman of this august house delivered the introductory remarks and briefed the purpose and objective of SAC meeting.

Agenda-1: Approval of the proceedings of the last SAC meeting.

The Senior Scientist & Head presented the proceedings of the last SAC meeting in the house which was held on 03.02.2021 and also highlighted on the activities undertaken based on the recommendations. The chairman taking the consent of the members approved the proceedings

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

The Senior Scientist & Head presented the following actions taken on the recommendation of the 21st SAC meeting

Sl. No.	Recommendation	Action taken
1.	Special focus on management of major pest and disease of important crops	<ul style="list-style-type: none">▪ A total of 08 no of training cum method demonstration programme were conducted including 200 no of beneficiaries.▪ Diagnostic field visit was conducted in collaboration with agriculture department to examine the infestation of pest in Kharif rice in Karlamunda block.▪ Demonstration on Integrated management of fall Army Worm in kharif maize was conducted in DFI village Sallepalli of M.Rampur. FLD on management of sucking pest in cotton was demonstrated in Kendugupka village of Bhawanipatna (beneficiaries:13)▪ Under ATMA, 02 no of capacity building programme on pest management practices of field crops were conducted covering 60 no. of beneficiaries.▪ Technical guidance on diseases pest management through social network app (Whatsapp group, text message, audio and video message, youtube channel NRRI-Barta). Technical advisory (voice call) in collaboration with Reliance foundation.
2.	Emphasis should be on Kharif onion cultivation in suitable agro-ecological pockets of the district	<ul style="list-style-type: none">▪ On farm testing on varietal assessment of high yielding variety of Kharif onion (Var. Bhima Super & L-883) was conducted (Village : Palsapada and Gandamer, Golamunda. No. of beneficiaries: 7) in Kharif, 2021.▪ Training cum method demonstration programme was conducted to aware and educate the farmers about the relative advantage of kharif onion cultivation followed by field visit to the onion grower.

		<ul style="list-style-type: none"> ▪ Visualizing the potential of kharif onion in the district horticulture department also have distributed onion seeds (var. Agri Found dark Red) in a subsidized rate. ▪ In the year 2021-22, approximately 40 ha of land is covered under kharif onion in the district. ▪ Technical bulletin on scientific cultivation of kharif onion was published for distribution among onion growers.
3.	Promotion of location specific Integrated Farming system (IFS) model in adopted villages in convergence mode	<ul style="list-style-type: none"> ▪ Two no. of Integrated Farming system (IFS) model was developed in DFI village by KVK, Kalahandi ▪ Pond based farming system (Fishery+ horticulture) at village Dhaner, Dh'garh Sj. Aditya Kumar Sahoo ▪ Fruit based farming system (Horticulture+ Agriculture) at village Boria, Kesinga Sj. Indubhuwas swain ▪ Sj. Aditya Kumar Sahoo (village Dhaner, Dh'garh) was felicitated in Krushi odisha -2020 towards his contribution in Integrated Farming system (IFS). He was also awarded as Agri-entrepreneurs at district level on 59th Foundation Day of OUAT held at KVK, Kalahandi ▪ With collaboration of horticulture department Horti-silvi based farming system (Horticulture+ Forestry) model is developed at village Ghantabahali, Junagarh . ▪ In the year 2021-22 watershed, Kalahandi has developed a total of 97 IFS units/farm pond in 4 blocks namely Bhawanipatna, Kesinga, Th.rampur and Karlamunda in technical collaboration with KVK, Kalahandi. ▪ Off campus and on campus Training programmes were conducted on "Rice based IFS." involving 40 nos. Trainees. ▪
4.	Processing and value addition of millet, horticulture, and forest based products	<ul style="list-style-type: none"> ▪ Three residential training programme was conducted on processing and value addition of Mushroom, Tomato and Drumstick involving 50 no of participants. ▪ To mitigate nutritional security and to promote millet cultivation in tribal areas, Odisha millet mission programme is operated in Kalahandi district approximately an area of 10,000ha. A convergence training was conducted on value addition and processing of millets involving WSGH . ▪ In collaboration with ORMAS a district level meeting was organized for procurement of dehydrated mushroom to avoid distress sale of oyster mushroom. ▪ Visualizing the distress sale of Chironji seed in the district, attempt is taken for processing of chironji through seed decortications. ▪
5.	Institutional linkage of KVK with the line department should be strengthened	<ul style="list-style-type: none"> ▪ District level Research-Extension interface meeting is conducted in liaison with all department . ▪ Agriculture Dept.- Diagnostic field visit, E-pest surveillance, crop cutting and field day celebration and Resource sharing etc. ▪ Horticulture Dept.- inspection of private nursery, capacity

		<p>building programme and joint field visit.</p> <ul style="list-style-type: none"> ▪ Veterinary Dept.- Training programme, prani sampark mela and jointly organising animal health camp and supply of elite poultry birds. ▪ NABARD- monitoring the WADI programme and technical guidance to the farmer group. ▪ Watershed: Joint field visit and monitoring agricultural programme and sharing of technical knowhow ▪ Leading NGOs- Attending sponsored training programmes, virtual meetings and video calls, farmers scientist interaction, meetings, workshops and assessing field activities etc.
6.	Promotion of soil moisture conservation techniques in drought prone areas	<ul style="list-style-type: none"> ▪ Two training programme was conducted on “Organic mulching in maize.” and “Crop residue management in Paddy-Maize cropping system. involving 50 nos of farmers/ farm women in Bhawanipatna and M. Rampur block . ▪ In situ moisture conservation techniques like mulching in vegetables, trench bunding method in mango, repair of bund was demonstrated at Pipalpada and Indramal village covering 95 nos. of farmers under NICRA project during 2021-22. ▪ Awareness programme regarding in situ moisture conservation method was conducted with collaboration of Dept. of Agriculture in Indramal, Kendugupka , Dhaner and Salepali village
7.	Supplements of probiotics in small animals for optimum body growth	<ul style="list-style-type: none"> ▪ Demonstration on dietary supplementation of probiotics on juvenile growth of goat was conducted at village Dhaner and salepali and Majhiguda covering 13 no of farmers. ▪ Two no of farmer& farm women training is conducted covering 50 no. of beneficiaries on disease management in goat. ▪ In collaboration with veterinary dept. training on deworming and vaccination was conducted covering 300 nos. of small ruminants.
8.	Location specific research on prebiotics supplements in milch animals to be conducted	<ul style="list-style-type: none"> ▪ Demonstration on prebiotics supplementation in Kalahandi buffaloes was conducted at at village Majhiguda and Naguapala covering 13 no of farmers. ▪ Four no of farmer& farm women training was conducted covering 100 no. of beneficiaries on feed management in milch animals. ▪ One animal health camp for large animals (150 no.) was organized at Majhiguda ▪
9.	Popularization of low water requiring fodder crops.	<ul style="list-style-type: none"> ▪ Four no of farmer& farm women training was conducted covering 100 no. of beneficiaries on cultivation and management of fodder crops ▪ Low cost silage was demonstrated at village Sikerguda covering 20 nos. farmers. With collaboration with NABARD and an FPO Bamunikhal, one silage processing unit with capacity of 2500

		<p>quintal was established which benefited fifty nos. of farmers around the village.</p> <ul style="list-style-type: none"> ▪ In collaboration with ICARDA low water requiring fodder crops like spine less cactus was demonstrated was conducted at Th. Rampur block covering 30 nos. of farmers .
10.	Promotion of poultry birds under semi intensive rearing system.	<ul style="list-style-type: none"> ▪ On farm testing low input dual type chicken breeds (Chhabro and Kaveri) in semi-intensive rearing system was conducted at village Kendugupka and Majhiguda covering 10 no of farmers. ▪ Kalinga brown breed of poultry birds (1500 nos. were supplied to beneficiaries (SHG and individual) under Dept. of Animal Husbandry of Kalahandi. ▪ Under revolving fund, 4050 no. of poultry chicks (i.e Kalinga brown, Kadaknath, Banaraja etc.) was supplied to the farm families in the year 2021-22. ▪ Four no of farmer& farm women training was conducted covering 100 no. of beneficiaries on rearing and brooding management in poultry.

Agenda- 3: Achievement made during Rabi 2020-21 and Kharif 2021.

The Senior Scientist & Head presented the overall achievements made by the KVK during the period from January 2021-December 2021 which was properly discussed by the house.

On farm testing: During the period, 08 OFTs were taken in different discipline and the result has been found satisfactory.

1. Assessment of foliar application of soluble fertilizers in Greengram (FP: Application of DAP@20 Kg/ha TO1: Foliar application of 2% urea at flower initiation stage and 15 days after 1st spray along with RDF TO2: Foliar application of 2% 19:19:19(N:P:K) at flower initiation stage and 15 days after 1st spray along with RDF. TO3: Foliar application of 2% urea at flower initiation stage and 2% 19:19:19(N:P:K)15 days after 1st spray along with RDF. The result showed that foliar application of 2% urea at flower initiation stage and 15 days after 1st spray along with RDF produced highest yield (8.26q/ha) in green gram

2. Assessment of IPM module for management of fall army worm in maize: Maize seed treatment with *Pseudomonas fluorescens* @10g/kg of seed, spraying of Streptocycline @ 300 ppm + COC @ 0.3% during disease appearance resulted in % diseases incidences to 1.71 from 15.4 (farmer's practice) and yield recorded was 43.9q/ha.

3. Assessment of Varietal evaluation of Kharif onion. Cultivation of onion var. L-883 recorded highest yield 176.1 q/ha over Bhima Super (162.5q/ha) and Agifound dark Red (148.2q/ha).

Frontline Demonstrations and Cluster Frontline demonstration: All total 15 frontline demonstrations have been conducted and cluster frontline demonstration (Pulses) covering 50ha of area.

1. Demonstration on weed management in Groundnut. Recommended Practice- Pre emergence application of Oxyflourfen @ 0.04 kg ai/ha followed by post emergence spray of imazethapyr

@ 0.12kg ai/ha at 20 DAS. The recommended practice showed a increase in WCE(%) 80.77 and yield up to 21.5% over local practices.

2. Demonstration on use of suitable herbicide in black gram. Recommended Practice- Pre-emergence application of pendimethalin @ 1.0 kg a.i./ha and Post-emergence application of Imazythapyr @ 750ml/ha. The recommended practice showed a increase in WCE(%) 75.85 and yield up to 17.34% over local practices.
3. Demonstration of high yielding Brinjal var. Swarna Ajay (Medium length (10-12 cm) and attractive light purple colour, resistant to phomopsis blight and bacterial wilt).The variety produced 312q/ha in farmers field which is 18.1% higher yield than the local variety.
4. Demonstration on dietary supplementation of probiotics on juvenile growth of goat. (Recommended practice - After 6 -8 hours of free grazing ,feeding of goat with probiotics 3 g/goat/day for 6 month). For recommended practice Net Return /3months is Rs.2850/- and that of farmers practice is Rs.2050/-

Allied activities: During this period a total of 88 nos. of training have been conducted of which 64 no of training for farmers & farm women, 11 nos. for rural youth, 13 no. for in-service personnel was conducted. A total of 1895 beneficiaries were trained under KVK for the above said period. Under revolving fund 10ha of paddy seed production was conducted. A total of 1,01,388 no vegetable seedlings, 2425 kg vermicompost and 4.05 kg of Bio-agent (Earthworm-*Eisenia Foetida*), 1621 no of mushroom spawn bottles and 107.6 kg of mushroom and 5050 no of Poultry chicks were produced.

Agenda – 4: Action Plan

The Senior Scientist & Head presented the detailed Action Plan developed by the KVK for the year 2022-23 which includes 82 nos. of trainings for Farmers & farm women, 12 nos. of trainings for Rural youth, 14 nos. of In-service personnel trainings, 19 nos. of FLDs, 09 nos. of OFTs for the above mentioned period.

Agenda – 5: Interaction among the members of SAC:

Interactions were made among the members and following action points were indicated

Dean, College of Agriculture, Bhawanipatana:

- There is a problem for drip irrigation due to high sedimentation in drip lines.
- Technology to combat soil sedimentation should be developed.
- Organic certification is required for identifying organic cotton in market, there is a long procedure which is time consuming. However, to make it successful a lot of stakeholders to be involved for organic certification.

CDAO, Kalahandi:

- The total cultivable area on cotton which is 6600 ha of Kalahandi district but maximum numbers of farmers are growing and selling BT cotton in the name of non-BT cotton because GMO cotton is not allowed in Odisha therefore any steps to be taken for revising the BT-Cotton policy in Odisha.
- He emphasized that as rice area is very high and production is in surplus so, popularisation of rice variety of export quality which can fetch good prices.

ADR, RRTTS, Kalahandi emphasized on following points

- Emphasis on acceptance of BT Cotton in Odisha and its marketing.
- Problem identification and prioritisation of important crops of Kalahandi district.

- Severity and spread of problem and its relevant proven technology for demonstration.
- Follow-up after trainings, feedback from farmers from training like rural youth.
- Large scale strengthening on farm mechanisation of cotton with the help of AICRP on cotton, yield of cotton to be increased, irrigation in cotton to be improved.

ADH, Bhawanipatna emphasized on

- Training on mushroom processing.
- More requirement of mushroom spawn.
- Training on banana cultivation.
- Supply of dragon fruit planting material through KVK.

DFO, Kalahandi:

- Discussed regarding schemes related to fishery during this year.
- Popularisation of bio-floc method of pisciculture and freshwater prawn culture.

Dr. Mahamaya Prasad Nayak, JDE, DEE, OUAT:

- A group of 2-3 farmers interested in organic farming to be selected for eligibility for demonstration and training in organic farming.
- Development of plan on organic farming and channelize it.
- Model farming system for marginal farmers to take up activities so, that they can replicate it.
- Federation of FPOs for better aggregation and higher scale of production.
- Currently, Kalahandi is not a water scarce district. Approach towards irrigated and non-irrigated condition will be different.
- Involvement of all line departments and convergence with them.
- Develop a village where 100% convergence can be seen.

DDM, NABARD:

- Kalahandi has maximum number of FPOs, therefore convergence of KVK, RRTTS and department participation for strengthening the technical knowledge on processing and marketing for FPOs.
- There are 85% small and medium landholding farmers therefore, a research model based upon small farmer holder for better yield to be prepared.
- Upscale of research model by department of horticulture for benefit of farmers.

ORMAS, Kalahandi:

- There is an institution to be developed by Govt. of Odisha exclusively dedicated to marketing which is to be functional within few months.

Chairman, FIAC, Bhawanipatna:

- Popularisation of organic farming through demonstration and training.

Senior Scientist and Head, KVK, Malkangiri:

- Production of hybrid Napier to be popularized in Kalahandi district.

Senior Scientist and Head, KVK, Koraput:

- As Kalahandi is water scarcity district, drip irrigation to be encouraged in vegetables like tomato.

Sri Suresh kumar Pradhan, farmer's representative emphasized on awareness should be created on use of pesticides and its harmful effects on human health.

JDE cum Cluster Head:

- Study of micro farming situation
- Ensure household nutritional security
- Development of model farming system
- Promotion of natural farming

The Chairman appreciated the suggestions of the members and requested for their cooperation for better functioning of KVK. The following action points were suggested

- i. Promotion on natural farming
- ii. Emphasis should be on Kharif onion cultivation in suitable agro-ecological pockets of the district.
- iii. Popularization of low water requiring crops and fodder.
- iv. Breed evaluation of semi intensive poultry chicks suitable for backyard conditions in tribal pockets.
 - v. Special focus on management of major pest and disease of important crops.
- vi. Promotion of site specific Integrated Farming system (IFS) model in adopted villages in convergence mode.
- vii. Promotion of popular varieties of seeds, quality planting material and breeds of poultry
- viii. KVK and department participation for strengthening the technical knowledge on processing and marketing for FPOs.
- ix. Institutional linkage of KVK with the line department should be strengthened.
- x. Processing and value addition of horticultural produce.

The meeting ended at 3.00 pm with a vote of thanks by Senior scientist & Head, KVK, Kalahandi.

ANNEXURE-I

List of Members attended the SAC Meeting held on 25.02.2022 at 11.00 AM.

Sl. No	Name	Designation & Address	Remarks
1.	Prof. Prasanjit Mishra	Dean, DEE, OUAT	Chairman
2.	Dr. S.K.Mondal,	Principle Scientist, ICAR- Agriculture Technology Application Research Institute, Kolkata,	Member
3.	Prof. Chintamani Panda	Dean, CA, BPT	Member
4.	Dr. Shivaprasad Sangram Singh	JDE cum Cluster Head, DEE.	Member
5.	Shri Pradipta Kumar Sahu	CDAO, Kalahandi	Member
6.	Dr. B.S. Nayak	ADR, RRTTS, BPT	Member
7.	Shri Gangadhar Jal	PD, Watershed, KLD	Member
8.	Shri Basanta Kumar Nayak	DFO, Kalahandi	Member
9.	Shri George M. Kerkatta	Dy. CEO, ORMAS	Member
10.	Shri Prasanta Mishra	DPM, OLM	Member
11.	Shri M.K. Meher	DDM, NABARD	Member
12.	Dr. Kedarnath Khamari	BVO, Bhawanipatna	Member