# Proceedings of 21<sup>st</sup> Scientific Advisory Committee Meeting

The 21<sup>st</sup> Scientific advisory committee meeting of KVK, Kalahandi was held on 03.02.2021 in the office of KVK, Kalahandi under the chairmanship of Prof. Pawan Kumar Agrawal, Hon'ble Vice Chancellor, OUAT, Bhubaneswar on virtual mode.

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. The Dean, Directorate of Extension Education briefed the purpose and objective of the SAC meeting and further the chairman of the SAC meeting delivered the introductory remarks.

## 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 06.11.2019 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 20<sup>th</sup> SAC meeting

SI. No.	Recommendation	Action taken
No.		
1.	Technology backstopping on small and minor millets to be promoted	<ul> <li>FLD on integrated nutrient management (INM) in ragi is conducted during kharif, 2020 covering 13 no. of beneficiaries of villages Balijore, Ghumerguda and kamardha. Besides two no. of farmers and farm women training is conducted covering 50 no. of beneficiaries on INM and establishment methods in ragi.</li> <li>In collaboration with millet mission, field day and crop cutting was conducted in association with Agriculture department and further 02 no. of capacity building programme on suitable varieties of ragi and scientific package of practices involving 100 no of millet growers was organized by DAPTA NGO</li> </ul>
2.	Demonstration and farmers awareness on Fall army worm (FAW) in Maize	<ul> <li>OFT on FAW management was conducted involving 13 nos of progressive farmers in adopted village Salepalli of M rampur block.</li> <li>One training programme was conducted on "FAW management" involving 25 nos of farmers/ farm women in Kesing</li> <li>Awareness programme with Dept. of Agriculture in different blocks like Kesinga, Bhawanipatna, Junagarh, Narla, Lanjigarh, Koksara in mission mode towards creating awareness as per the guidelines of Govt. of India.</li> <li>Leaflets and Extension bulletins supplied by Dean Extension Education, OUAT, Govt. Of India and Dept. of Agriculture are distributed in our adopted villages also in different blocks</li> </ul>
3.	Promotion of farm machinery in agriculture.	<ul> <li>FLD was conducted on use of seed drill in direct seeded rice in irrigated medium land covering an area of 02 ha and 13 no of beneficiaries.</li> </ul>

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4.	reco weed & in of in En m	<ul> <li>Demonstration on performance of portable cotton picker was showcased during rabi, 2021 in cotton growing areas.</li> <li>Under millet mission 16 no. of ragi pearler cum thresher is distributed in millet growing areas. Besides training cum method demonstration was conducted on ragi pearler cum thresher during rabi,2021 involving 20 no. of beneficiaries</li> <li>Under Pulse Seed Hub programme pulse thresher is supplied to the growers for post harvest operation.</li> <li>Io nos of progressive farmers have been identified for demonstration on blast disease management in groundnut is conducted during rabi, 2021 covering an area of 2 ha and 13no. of beneficiaries of Bindhani and sallepali villages.</li> <li>Training programme was conducted on "blast disease management in paddy" involving 25 nos of farmers/ farm women in Bhawanipath block</li> <li>under ATMA, 03 no of capacity building programme on weed management practices in major vegetables and field crops was conducted involving 13 no of beneficiaries.</li> <li>FLD on foliar application of micro nutrient mixture in onion is conducted involving 13 no of beneficiaries (village- Sallepali, kendugupka and Matia) in rabi, 2021</li> <li>Farmer&amp; farm women training is conducted covering 50 no. of beneficiaries on application of micro nutrient application of proper dose of micronutrient in onion and pointed gourd. In collaboration with horticulture dept. 02 no of training was conducted on significance of micronutrient application in vegetable crops.</li> </ul>	
6.		<ul> <li>micronutrient application in vegetable cropp.</li> <li>micronutrient application in vegetable cropp.</li> <li>During kharif, 2020 FLD on popularization of single line trellis system in bittergourd was conducted covering 13 no. of beneficiaries in Kendugupka, Bhawanipatna</li> <li>One OFT on different ripening method of banana to be conducted</li> </ul>	
7		<ul> <li>may be taken up</li> <li>Promotion of use of plant growth regulators in mango orchard for regular bearing was conducted involving 100 no. of mango growers.</li> <li>Under Wadi programme, field visit is carried out by KVKs for technical backstopping and advisory for use of plant growth regulators in mango is conducted in Golamunda (no of beneficiries:13)</li> </ul>	n s
	8.	Popularization of improved       • Front line demonstration on kadadited         poultry breed suitable for       Bindhani and Majhiguda was conducted covering 10 no c         backyard condition in tribal       farmers.	л —

		ction mixture and prohiotics
	pockets for sustainable livelihood security	<ul> <li>On farm testing on use of multienzyme mixture and probiotics on growth of chickens in semi intensive rearing system was conducted during rabi involving 13 no of beneficiaries.</li> <li>Under revolving fund, 3991 no. of poultry chicks (i.e rainbow rooster, chhabro, Banaraja) was sold to the farm families in the year 2019-20.</li> <li>Front line demonstration on low cost silage at village Sikerguda,</li> </ul>
9.	Promotion of vaccination schedule, feed supplement and worm infestation of large ruminants	<ul> <li>Front line demonstration on low cost strage at vining: ontropacts, Kalahandi was conducted involving 10 no of beneficiries.</li> <li>On farm testing on assessment of different oil cakes on performance of CB cows conducted.</li> <li>Training on different vaccination schedule and de-worming in large ruminants covering 100 no. of beneficiaries</li> <li>In association with NABARD one silage processing unit set up in village Sikerguda with complete automation by which approx. 180 no of maize growers will be benefitted</li> <li>In close coordination with veterinary dept. training on poultry management and vaccination schedule of poultry chicks are being conducted.</li> <li>Agriculture Dept Diagnostic field visit, monitoring farmers field in case of incidence of insect pest, E-pest surveillance, crop cutting and field day celebration, jointly conducting extension activities i.e World soil day and farmers fair cum farmer scientist Interaction, awareness campaign and Resource sharing etc.</li> <li>Horticulture Dept inspection of private nursery, capacity building of entrepreneurs, monitoring and joint field visit.</li> <li>ATMA- technical knowledge sharing, attending farmer field school, field day and imparting training on krushak sampark mela etc.</li> <li>Veterinary Dept Capacity building of farmers and farmwomen, prani sampark mela and jointly organising animal health camp and supporting the demand of the district by supplying 21days old chicks to the farm families.</li> <li>NABARD- monitoring the WADI programme and technical guidance to the farmer group.</li> <li>Watershed: joint field visit and monitoring agricultural programme and sharing of technical knowhow</li> <li>Leading NGOs- attending virtual meetings and video calls, farmers scientist interaction, meetings, workshops and assessing field activities etc</li> </ul>
11.	Promotion of popula varieties of seeds, quality planting material an	<ul> <li>Under revolving fund, vegetable seedlings distributed to the farmers. In 2019-20 a total of 1, 36,128no.of seedling is distributed.</li> </ul>
	breeds of poultry	<ul> <li>In fruit crops, papaya (var. Red lady), Drumstick (var.PKM-1), Mango (Var. Langra &amp; Dashehri) is promoted by KVK</li> <li>QPM Verification of private and Govt. nursery in collaboration with horticulture Deptt.</li> <li>Under revolving fund, 3991 no. of poultry chicks (i.e rainbow</li> </ul>

rooster, chhabro, Banaraja), 1500 no of mushroom spawn
bottles and 3061kg of vermi compost was supplied to the farm
families in the year 2019-20.

### Agenda- 3: Achievement made during April 2019-March 2020

The Senior Scientist & Head presented the overall achievements made by the KVK during the period from April 2019-March 2020 which was properly discussed by the house.

**On farm testing**: During the period, 07 OFTs were taken in different discipline and the result has been found satisfactory.

1. Assessment of BPH tolerant rice varieties. (FP: Rice var. MTU-7029 Dur.-135 days, tolerant to BPH & Blast. av. Yield- 40q/ha, TO1: Rice var. CR Dhan 307(Maudamani), Dur.- 135-140 days, non-lodging type, Med. Resistant to BPH, Av. Yield-55q/ha, TO2: Rice var. Hasanta Dur.- 145 days, non-lodging type, mod. Resistant to BPH, Av. Yield-50q/ha ),. The result showed Hasanta variety produced yield (39.15q/ha) over CR Dhan 307 (38.75q/ha) and pest incidence was reduced from 25.85% to 5.12% and No. of effective tiller/hill was 14.02

2. Assessment of IPM module for management of fall army worm in maize: Application of Emamectin benzoate @ 0.4 g/l of water to manage the  $2^{nd}$  &  $3^{rd}$  instars larval stage showed better result by which cob infestation was reduced from 25% to 5%, percentage infestation per plant was only 2% and yield recorded was 36.6q/ha.

3. Assessment of different plant growth regulators for crop regulation in mango. Application of paclobutrazol 25 SL @ 1 ml/meter canopy spread results into higher fruit yield per plant (42.5kg) and yield was recorded185q/ha which is65.1% incremental yield over local check.

**Frontline Demonstrations and Cluster Frontline demonstration**: All total 17 frontline demonstrations have been conducted and cluster frontline demonstration (Pulses) covering 50ha of area.

- 1. Demonstration on integrated approach for management of red spider mite in brinjal . (Recommended Practice- Installation of blue trap @ 25 no./ha & Application of Etoxazole 10 % SC @ 40 g a.i /ha). The recommended practice showed a drastic reduction of infestation rate and increase of yield upto 20.5% over local practices.
- 2. Demonstration on wilt tolerant hybrid Tomato var. Arka Samrat (Wilt resistant hybrid tomato Arka Samrat with triple disease resistance to ToLCV, BW, early blight) The variety produced 328.2q/ha in farmers field which is 37.03% higher yield than the local variety. Blight infestation reduced from 20% to 8% and avg. fruit weight is 87g.
- 3. Demonstration of Kadaknath Chicken in Backyard . (Recommended practice Rearing of Kadaknath in back yard with 30-50 gm of feed per bird, vaccination against RD on 7th day, 28 day, IBD on 14th day). The demonstrated breed gained cumulative body weight is 587 g in 8 weeks while local poultry bird weight is 365g. Annual net income of 20 Kadaknath bird is 6940/- which is more than double of local poultry breed.
- 4. CFLD on Blackgram Cv. PU-31 was conducted at farmers field which recorded avg. yield of 7.6q/ha which is 16.8% more than the local check. No of pod/plant was 44 and pod length was 4.6cm.

**Training:** During this period a total of 84 nos. of training have been conducted of which 59 no of training for farmers & farm women, 11 nos. for rural youth, 12 no. for in-service personnel and 02 no

of Sponsored (ASCI) programme was conducted. A total of 1800 beneficiaries were trained under KVK for the year 2019-20. Under revolving fund 10ha of paddy seed production was conducted. A total of 1,36,128 no vegetable seedlings,3061 kg vermicompost and 4.05 kg of Bio-agent (Earthworm-*Eisenia Foetida*), 1500 no of mushroom spawn bottles and 132.5 kg of mushroom and 3991 no of Poultry chicks (Banaraja, Chhabro, Rainbow rooster) were produced.

#### Agenda – 4: Action Plan

The Senior Scientist & Head presented the detailed Action Plan developed by the KVK for the year 2021-22 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

During the introductory remark, Sj. Narendra Behera, CDAO, Kalahandi expressed that non availability of Minimum Support Price and distress sale of Maize is a major concern as more than 20000ha area is under maize. Moreover he stressed on research trial on Yellow mosaic vein virus management in greengram, and introduction of suitable cold tolerant variety and its suitable planting time under rabi greengram. Further he also expressed the need for establishment of dal processing unit, cotton ginning mill and processing industry in cotton for farmers of Kalahandi district.

Sri S.R Pattnaik, Deputy Director of Horticulture, Kalahandi revealed that Kalahandi is suitable for horticultural crops, so need for expansion of area under kharif onion demonstration, and as the district has potential for pomegranate plantation therefore technology may be standardised for better fruit setting and pest management practices. Periodical need based training may be conducted at KVK for knowledge up gradation for HEW.

Dr Girish Kumar Mohanty, SDVO, Kalahandi, Kalahandi suggested that KVK and district department should work collectively to have a visible impact on animal husbandry sector further he added research trial on pro-biotics in small animal and pre & pre-biotics supplements in milch animal may be studied, as there is a large scope for poultry development, therefore different poultry breed may be promoted and suitable backyard goatery may be developed.

Sj.Kumuda chandra Patra, PD, Watershed highlighted importance of Integrated farming system (IFS) model in watershed areas and focused on working in a convergence mode to resolve the emerging issues of the district. At the same time he focused on construction of farm pond for harnessing higher productivity by cultivating remunerative crops i.e fruits and off -season vegetables.

Sj, Ajay Mohanty, AFC India Ltd. stressed upon cultivating more no of crop depending upon the available soil moisture. He also added steps may be taken to accelerate silage production in dairy based blocks and construction of storage structure for fruits crops specially mangoes as we have experienced a distress sale in past few years.

Dr.B.S.Nayak, ARD(I/c), RRTTS, Bhawanipatna emphasised on promotion of location specific research trial of RRTTS to be taken up as OFT/FLD in KVK programme and the feedback of farmers should be transferred to the research wing for further course of action. Due to erratic rainfall and short window for agricultural operation, short duration drought prone rice varieties and low water requiring crops to be promoted and cropping pattern in upland areas to be meticulously selected.

Dr.Jyoti Prabha, Scientist, IISWC, Koraput. expressed in rainfed areas suitable rice varieties to be selected and in upland areas more remunerative crops to be developed. KVK should document the technology which is practiced and successful adopted by the farming community in form of case study and success stories. Indigenous Technical Knowledge, water use efficiency and resource conservation techniques should be disseminated to the farmers by various extension activities.

Prof. Avijit Haldar, Principle Scientist,, Agriculture Technology Application Research Institute, Kolkata expressed on developing water harvest structure at adopted villages for mitigating drought situation. Much focus on rainfed farming and soil moisture conservation for getting more yield from a single patch of land. Technologies i.e drought tolerant crop, low water requiring fodder, mulching and hydrogel to be demonstrated and innovative technologies from research institute to be showcased at farmers field and further promoted. He also advised to develop a farming system model in each adopted village taking all the important resources into consideration.

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 of soil moisture conservation techniques in drought prone areas
- ii. Emphasis should be on Kharif onion cultivation in suitable agro-ecological pockets of the district.
- iii. Popularization of low water requiring fodder crops.
- iv. Special focus on management of major pest and disease of important crops.
- v. Breed evaluation of semi intensive poultry chicks suitable for backyard conditions in tribal pockets.
- vi. Study on supplements of probiotics in small animals for optimum body growth.
- vii. Location specific research on pre & probiotics supplements in milch animals to be conducted.
- viii. Promotion of site specific Integrated Farming system (IFS) model in adopted villages in convergence mode.
- ix. Promotion of popular varieties of seeds, quality planting material and breeds of poultry
- x. Processing and value addition of millets, horticulture and forest based products
- xi. Institutional linkage of KVK with the line department should be strengthened.

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

Sr. Scientist & RUNCINSiantinua Head K.V.K. Kalahandi

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Dean Extension Education OUAT, Bhubaneswar Dean Extension Education OUAT, Bhubaneswar

### ANNEXURE-I

List of Members attended	the SAC Meeting held	on 03.02.2021 at 10.30 AM.
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SI.	Name of participant	Address	Status
No.			
1	Prof. Dr. Pawan Kumar Agarwal	Vice Chancellor, OUAT, Bhubaneswar	Chairman
2	Dr. L.M. Garnayak	Dean ,Extension Education, OUAT, BBSR	CO- Chairman
3	Prof. Avijit Haldar,	Principle Scientist, ICAR-Agriculture Technology Application Research Institute, Kolkata,	Member
4	Dr. Jyoti Prabha, Scientist,	IISWC, Koraput	Member

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5	Sj. Narendra Kumar Behera	Chief District Agriculture Officer, Kalahandi	Member
5	Sj. Sailesh Ranjan Pattnaik	Deputy Director of Horticulture, Kalahandi	Member
7	Dr G.K Mohanty	SDVO, Kalahandi	Member
8	Sj Kumuda Chandra Patra	Project Director, Watershed	Member
9	Sj.Prashant Kumar Naik	District Fishery Officer, Kalahandi	Member
10	Dr. B.S Naik	ADR (I/c), RRTTS, Bhawanipatna	Member
11	Dr. Girish Kumar Mohanty	S.D.V., Bhawanipatna	Member
12	Basanta Kumar Nayak	Dist. Fisheries Officer	Member
13	Jagyanseni Benua	P.O. Kalahandi ISWO Office, Kalahandi	Member
14	Krushna Chandra Patra	Deputy Director cum Project Director, Watershed Development, Kalahandi	Member
15	Purna Chandra Shaw	BAO, O/O CDAO, Kalahandi	Member
16	Dhruba Prasad Singh	LDM (SBI) Kalahandi	Member
17	Krushna Charana Mishra	AFC India Ltd. Programme Manager NABARAD	Member
18	Shankar Prasad Kalamuri	E.E., K.M.I. Division, Bhawanipatna	Member
19	Suresh Chandra Pradhan	Farmer Vill. Kendugupka	Member
20	Pramodini Mohapatra	Farmer vill. Durduri	Member
21	Janmejaya Mahapatra	Farmer Vill. Durduri	Member
22	Gopabandhu Sahu	Farmer Vill. Matia	Member
23	Santanu Ku. Behera	Journalist, Bhawanipatna	Member
24	Basanta Kumar Biswal	Farmer, Vill. Kendugupka	Member
25	Dr. Amitabh Panda	Senior Scientist & Head, KVK, Kalahandi	Member Secretary

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Senior Scientist & Head K.V.K. Kalahandi