

**PROCEEDINGS OF THE 20TH SCIENTIFIC ADVISORY COMMITTEE
MEETING OF KRISHI VIGYAN KENDRA, RAYAGADA, GUNUPUR HELD ON 19TH
DECEMBER 2024**

The 20th Scientific Advisory Committee meeting of KVK, Rayagada was held on Dt. 19.12.2024 at 11.00 AM at KVK, Rayagada under the Chairmanship of Dean, Extension Education, Prof. P. J. Mishra, Directorate of Extension Education, O.U.A.T, Bhubaneswar and Dr. P. K. Mohanty, Deputy Director, DEE participated in the meeting as Co-Chairman. Principal Scientist, ICAR-ATARI, Kolkata, Dr. K. S. Das, participated in the meeting.

After an introductory remark on agro-scenario of the district, the Chairman briefed participants about the importance of the meeting and participation of the members. Then he asked Sr. Scientist and Head to start the proceedings as per the agenda.

AGENDA-1: Approval of the proceedings of last SAC meeting

Senior Scientist & Head circulated the proceeding of last SAC meeting to all the members for collecting the feedback and presented the proceedings in brief. He then presented the actions taken by the KVK on the recommendation of the last SAC meeting as follows.

Sl. No.	Recommendations	Action Taken
1.	KVK should give emphasis on drought tolerant varieties in demonstrations	➤ During <i>Kharif</i> 2024-25 drought tolerant varieties of rice cv. MTU- 1153, pigeon pea cv. LRG-52, PRG-176 have been demonstrated in farmers' field and crop cafeteria was maintained in the instructional farm for knowledge of visiting farmers. ➤ Foundation seeds of pigeon pea cv. LRG-52 has been supplied to the farmers of 9 villages for seed production under TSP programme 2024-25 of in convergence with ICARDA for its area expansion in the district. • Trainings conducted – 7 • Villages covered - 16 • Farmers and farm women covered- 88
2.	Technologies with reference to crop diversification should be given priority	➤ Different crop diversification modules based on the AES and soil nutritional status has been prepared in consultation with stake holders. ➤ Farmers and farm women were aware in awareness programmes and farmers scientist interactions ➤ These modules will be communicated to district for its adoption through cluster approach for economic sustainability of small and marginal farmers.
3.	More number of farmers should be trained on orchard management in district	➤ A model mango orchard has been established in KVK instructional farm for knowledge and awareness of visiting farmers. ➤ Farmers and farm women were trained on different

		types of orchard and their management i.e. training, pruning, fertigation, IPDM measures rejuvenation of old orchard. Beneficiaries were also sensitized on intercropping of newly developed orchard with hill broom for higher profit. • Trainings conducted- 2 • Farmers and farm women covered- 50 • Villages covered: 5
4.	Varieties suitable under perennial fodder cultivation are to be demonstrated. Super napier can be placed in crop cafeteria.	➤ Considering the demand for green fodder during <i>Rabi</i> season steps has been taken for fodder cultivation in farmers' field in convergence with district Veterinary Department. Seeds of sorghum COFS- 31 has been supplied to 7 farmer. ➤ Perennial fodder varieties such as Super napier, spineless cactus, sorghum, COFS- 31 have also been demonstrated in the crop cafeteria to motivate livestock farmers for higher adoption. • Trainings conducted – 1 • Villages covered - 3 • Farmers and farm women covered- 7
5.	Farmers and farm women should be trained on brooding management of day old chicks with supply of chicks under TSP programme.	Demo unit with brooding facility for 1 day old chicks has been maintained at KVK instructional farm. Farmers and farm women are being trained on low cost brooding management practices with use of tin, card board and aluminum sheet as chick guard with spacing 3 sqft/chick and 100 watt bulbs per 33 birds to maintain 32°C room temperature. • Trainings conducted- 3 • Farmers and farm women covered- 75 • Villages covered- 4
6.	More farmers should be covered in training and awareness on soil health management with emphasis on improvement of soil fertility and subsequently high return	➤ Training on STBF recommendation for field crop and vegetable has been taken up by KVK Scientists from time to time during <i>Kharif</i> and <i>Rabi</i> season. ➤ In district level and block level trainings, KVK scientists also imparted scientific technologies to farmers and farm women on soil health management by use of organic and chemical formulation. ➤ Natural farming technologies have been demonstrated in 3 villages under TSP programme 2024-25. ➤ Massive awareness on use of Jivamrit, Bijamrit, Agneyastra, Brahmastra, etc. has been created for reducing the use of chemicals.

		• Trainings conducted- 4 • Farmers and farm women covered- 100 • Villages covered- 9
7.	SHGs may be trained on flower cultivation for economic empowerment	➤ Scientific cultivation practices on rose, crossandra, marigold and tuberose were demonstrated on farmer field during 2023-24. ➤ Two SHGs were included in frontline demonstration on tuberose cultivation as income generation activity for farm women in <i>Kharif</i> 2024. ➤ Exposure visit – cum - awareness programme for SHGs and farm women were taken up in village Kuturu, Penkam, Khadasi, Sinjamguda, Putasing and Gunupur. ➤ Training on scientific cultivation of rose also imparted to SHGs of Ramnaguda block in convergence. ➤ KVK is also supplying quality seedlings of marigold for year the round cultivation. • No. of trainings conducted- 3 • SHGs covered- 4 • Villages covered: 7
8.	More and more villages are to be covered in paddy straw mushroom training programme.	➤ Each year KVK Rayagada has enrolled new beneficiaries in F/FW and vocational training on paddy straw mushroom cultivation as per the approved action plan. ➤ Demonstrations on mushroom cultivation were taken up in many villages under TSP programme. ➤ KVK also supplied quality spawn to farmers and farm women. • Trainings conducted- 9 • Farmers and farm women covered- 230 • Villages covered- 6
9.	Strawberry cultivation may be introduced in district through KVK activity	➤ During <i>Rabi</i> 2024-25, a strawberry demonstration unit has been developed in KVK instructional farm for showcasing scientific package of practices in strawberry cultivation. ➤ KVK will support for dissemination of scientific technology for strawberry cultivation in farmers field.
10.	Awareness programme on Kissan App and e-NAM App may be arranged for farmers and farmer women	In awareness and training programmes, farmers were trained on use of Meghdoot, Rice expert, Plantix, Umang, Krish e-Nidaan.

AGENDA-2: Achievements made by the KVK

The Sr. Scientist and Head presented the overall achievements made by the Krishi Vigyan Kendra during *Rabi* 2023-24 and *Rabi*-2024-25.

Summary of achievements for *Rabi* - 2023-24 and *Kharif*-2024

Trainings: KVK has conducted 45 trainings for practicing farmers and farmwomen, 7 rural youth trainings, 3 in-service trainings and 5 vocational trainings involving 1420 beneficiaries.

On Farm Testing: A total of 4 OFTs were conducted i.e. Assessment on high yielding varieties of sesame, assessment on medium duration rice varieties under rainfed condition, assessment on management of wilt complex in tomato by using Jivamrit and Bijamrit, assessment on IPM Modules for the management of Brinjal fruit and shoot borer involving 28 farmers and farm women during *Rabi*- 2023-24 and *Kharif*-2024.

- In assessment on high yielding varieties of sesame, on an average 27.1% higher yield was recorded in TO₂- sesame var. Smarak followed by 22.9% higher yield in TO₂ sesame var. Subhra than farmer's var. Uma.
- The assessment on medium duration rice varieties under rainfed condition resulted highest yield of 46.25q/ha in TO₂-rice var. Kalinga Dhan 1203 followed by 43.87q/ha in TO₁- rice var. Kalinga Dhan 1205 over the farmers practice with average yield of 41.2q/ha. In rice var. MTU-1001.
- In assessment on management of wilt complex in tomato by using Jivamrit and Bijamrit, TO₂-Application of 200 L of Jivamrit per acre with irrigation water at an interval of 15-20 days on standing crop @ 5-6 times+ application of prepared Bijamrit for seed treatment, dry the mixture under shade before 24 hours of sowing recorded highest disease pest control with BC ratio 3.65 followed by TO₁- application of 200 L of Jivamrit per acre with irrigation water at an interval of 15-20 days on standing crop @ 5-6 times with BC ratio 3.59 over FP-Carbendazim + Mancozeb @ 2g/L with BC ratio 2.87.
- In assessment on IPM Modules for the management of Brinjal fruit and shoot borer TO₂-Clipping of infested shoots and fruits regularly, pheromone traps @ 25/ha at 30 DAT, spraying of Azadiractin 1500 ppm @ 3 mL/L at 20 DAT, spraying of *Bt* @ 2 mL/L twice at 30 DAT and 45 DAT, spraying of Chlorantraniliprole 18.5% SC @ 0.25 mL/L at 60 DAT minimizes fruit and shoot borer infestation from 39.31% in FP to 7.5% followed by TO₁-Erection of Pheromone traps @ 20/ha, release of *T. chilonis* @ 50,000/ha 6 times from 21 DAT at weekly interval, spraying of *Bt* at flowering @ 2mL/L two times in 10 days interval. Spraying of Emamectin benzoate 5% SG @ 200 g/ha at ETL > 5% with fruit and shoot borer infestation of 10.9%.

Front Line Demonstration:

- KVK has conducted 12 FLDs i.e. demonstration on INM in blackgram, demonstration on integrated weed management in groundnut, demonstration on weed management in maize, demonstration on weed management in finger millet, demonstration on collar rot management in groundnut, demonstration on fruit fly management in bitter melon, demonstration on integrated pest management of thrips and mite in chilli,

demonstration on fruit borer management in okra, demonstration on poultry in backyard, demonstration on nutritional garden for improving nutritional security of farm families, demonstration on tuberose cultivation for income generation and demonstration on scientific honey bee rearing involving 120 beneficiaries.

- In demonstration on INM in Blackgram, RP: Use of soil test based fertilizers application + organic integration (FYM @ 5t/ha or vermin compost 2.5t/ha) + seed inoculation of Rhizobium @ 1.25kg/25 kg of seed resulted 18.6% higher yield than in FP-Application of DAP @ 20 kg/ha.
- In demonstration on integrated weed management in groundnut, RP: Pre-emergence application of pendimethalin 30% + imazethyper 2% @ 1.0 kg/ha ready mix fb post emergence application of quizalofop-p-ethyl @ 50g/ha at 20 DAS has recorded 14.86% more yield than FP: Hand weeding at 40 DAS.
- In demonstration on Weed Management in maize, RP: Post emergence application of Tembotrione 100g/ha + Atrazine 500g/ha at 20 DAS + one hand weeding at 40 DAS recorded 12.35% higher yield in comparison to FP: Use of Atrazine 1kg/ha.
- In demonstration on weed management in Finger millet, RP: Pre-emergence application of Bensulfuron methyl 0.6% + pretilachlor 6% at 0.66kg/ha at 2 DAT fb 2,4-D ethyl ester 0.5 kg/ha at 30 DAT has recorded on an average 20% yield increase over FP -Manual weeding at 35 DAT with B C ratio to 1.71 from 1.64.
- In demonstration on collar rot management in Groundnut, seed treatment with (Carboxin 37.5% + Thiram 37.5 %) @ 2.5 g/kg seeds and alternate spraying with Chlorothalonil 75% WP @ 1.5 g/L and Carbendazim 2 g/L at 15 days interval recorded 12.6% less disease incidence and 39.02% higher yield than FP i.e. application of Carbendazim + Mancozeb @ 2 g/L.
- Soil application of Chloropyrifos dust around the plant at 30 DAP, placement and spot application of Jaggery (100 g), Thiodicarb 75% WP (2 mL) and water (1 L) poison bait (BAT), installation of cue lure @ 20/ha (MAT) and periodic removal and destructions of damaged fruits in demonstration on fruit fly management in bitter melon recorded 30.7% more control over fruit fly incidence with on an average 93 adults in trap per week in comparison to FP: Chlorpyrifos @ 1 L/ha.
- In demonstration on integrated pest management in thrips and mite in chilli, soil application of neem cake @ 2.5 q/ha, installation of blue sticky traps @ 50/ha at 25 DAT, alternate application of Difenthiuron 50WP @ 625 g/ha and Spiromesifen 240 SC @ 500 mL/ha at 10 days interval starting from 30 DAT is found to be more effective with 37% more control over thrips and mites incidence than farmer's practice i.e. application of Imidacloprid @ 3mL/10 L of water.
- Application of Chlorantraniliprole 18.5% SC @ 150ml/ha twice at 30 and 45 DAS in demonstration on fruit borer management in okra resulted 27% reduction in pest infestation over FP: Profenophos @ 2mL/L.
- Demonstration on Scientific Beekeeping with *Apis cerana indica*, RP- Regular and periodic bottom board cleaning, maintaining healthy and populous colony, regular and periodic dearth feeding, removal of old combs and allowing new comb construction, need based brood comb alteration and need based colony union or division resulted an additional income of ₹3600/ box/ year for farmers farmwomen.

- During the demonstration on Poultry in backyard, about 62% increase in meat and 51% increase in egg is recorded in poultry breed Sonali in comparison to local breed.
- In demonstration on Nutritional Gardening for Improving Nutritional Security of farm family, in proper lay out involving vegetables (spinach, amaranthus, coriander, green peas, carrot, broccoli, radish, tomato, onion, cowpea, cucurbits and one drumstick) and fruits (02 papaya plants, 01 lime and 02 banana) for getting available nutrition year round resulted about 73% increase in daily intake of vegetable/day /head and increase in BC ratio to 2.08 in comparison to FP with BC ratio 1.6.
- In demonstration on Tuberose cultivation for income generation, cultivation of Tuberose cv. Arka Prajwala with spacing 30cm x 20 cm, NPK:200:200:200kg/ha resulted an average net return of ₹249234/- with BC ratio of 2.7.

Other extension activities:

- Sr. Scientist and Head indicated that apart from the regular demonstration and training activities, KVK has also conducted 856 extension activities covering about 18371 beneficiaries which include field days, Kisan melas, soil testing campaign, diagnostic field visits, Kissan goshi, Radio and TV talk, Ex-trainees sammelon etc.

Cluster Front Line Demonstration:

- In Rabi 2023-24, Cluster Front Line Demonstration on Sesame var. Smarak was conducted in 20 ha area covering 50 beneficiaries. Improved package of practices has been demonstrated for increasing the productivity of Sesame var. Smarak. Average yield obtained is 7.2 q/ha as compared to 4.9 q/ha in farmers' practice.
- Cluster Demonstration on Groundnut var. KL 18-12 was conducted in 60 ha area enrolling 150 beneficiaries. Improved package of practices has been demonstrated for increasing the productivity of Groundnut var. KL 18-12 in Kharif 2024. Average yield obtained is 21.7 q/ha as compared to 14.6 q/ha in farmers practice.

AGENDA-3: Action Plan, 2025-26

Training: The Sr. Scientist and Head presented the detailed action plan of KVK for the year 2025-26 which includes 84 FFW training programmes, 16 rural youth trainings, 08 in-service trainings and 08 vocational trainings covering 2660 beneficiaries.

On-farm Testing: Total 8 OFTs will be conducted viz. Assessment of nutrient management in seed yield of green gram, Assessment of nutrient management in cotton, Assessment of yellow stem borer and leaf folder management in rice, Assessment of brinjal fruit and shoot borer management, Assessment of different chilli varieties, Assessment of onion varieties in Rabi, Assessment on production of straw mushroom from semi composted substrate and Assessment of processing and packaging methods of tender Jackfruit.

Front Line Demonstration: In total 16 FLD will be conducted during 2025-26 viz.

Demonstration on weed management in finger millet, Demonstration on medium duration rice cv. Kalinga Dhan -1203, Demonstration on short duration sesame var. Kalinga sesame 3-1, Demonstration on INM in cabbage, Demonstration on Integrated management of thrips and mites in chill, Demonstration on fruit borer management in okra, Demonstration on management of wilt complex in tomato by using Jibamrita and Bijamrita, Demonstration on Anthracnose disease management in Mango, Demonstration on high yielding tomato variety

Kalinga tomato 121, Demonstration on bending technology in guava for increasing productivity, Demonstration on growth promoter for improving fruit retention, yield and quality of mango, Demonstration on marigold variety Arka Vibha, Demonstration on Gangama Mandal Nutri-garden Model for household nutritional security, Demonstration on preparation of value added product from tamarind, Demonstration on brooding management in chicks, Demonstration on value addition of tomato by preparing powder

Areas of improvement in KVK for enhancing its performance

- Approx. 800 m boundary wall is necessary in seed production unit to prevent entry of stress passing animals.
- Continuous flow of iron water is a problem for maintenance of crop cafeteria and demo units in instructional farm.
- Infrastructures like Gid down, Implement shed, renovation of threshing yard are barely necessary as seed production programmes are taken up in both seasons.

AGENDA-4: Recommendations by SAC Members

Following action points were suggested by members of the SAC:

1. KVK should demonstrate climate resilient agricultural practices in farmers' fields.
2. Local varieties of paddy should be showcased in the KVK instructional farm to create awareness among visiting farmers and ensure their conservation.
3. The KVK should finalize and demonstrate suitable windows for off-season vegetable cultivation.
4. Introduction of low-input duck rearing in farm ponds may be taken up by the KVK.
5. Training programmes on vermicomposting should be imparted to SHG groups.
6. Training on orchard management including pruning, training, INM, and IPM practices should cover more beneficiaries.
7. SHG groups should be trained in processing and preservation of surplus vegetables.
8. The spread and intensity of ragi variety *Arjuna* in the district during 2017-2024 should be documented.
9. Convergence among all stakeholders is essential for the development of smart villages in the district.
10. Through demonstration programmes, the KVK should extend its outreach to all blocks of the district.
11. KVK activities should be uploaded regularly on the designated KVK portal.


17.01.2026
Senior Scientist and Head
KVK, Rayagada


17/1/26
Dean Extension Education
OUAT, Bhubaneswar

Annexure-I

Members participated in the 20th SAC Meeting on Dt.19.12.2024

Sl No	Name	Designation and address	Status
1	Prof. P.J. Mishra	Dean, DEE, OUAT, Bhubaneswar	Chairman
2	Dr. P.K. Mohanty	JD, UEBP, DEE, OUAT, Bhubaneswar	Co- Chairman
3	Dr.K.S.Das	Principal Scientist , ICAR, ATARI,Zone-V,Kolkata	Member
4	Dr. Gyanaloka Das	ADR, RRTTS, G Udayagiri	Member
5	Mr. Bishnu Prasad Kar	CDAO-cum-PD ATMA, Rayagada	Member
6	Mr. Dayanidhi Rout	DDH, Rayagada	Member
7	Dr. DebarajNayak	CDVO, Rayagada	Member
8	Mrs. PurnapriyaSuara	AFO Gunupur	Member
9	Mr. Santosh Ku. Samal	DDM, NABARD	Member
11	Dr. Dayanidhi Bag	PD, Watershed	Member
12	Mr.BrundabanBehera	ADO, Gunupur	Member
13	Mr.Gangadhara Mishra	FRO, Gunupur	Member
14	SushamaPrasadi	CDPO, Gunupur	Member
15	Dr. Alok Kumar Acharya	SDVO Gunupur	Invitee
16	Jhumuri Dalai	Assistant Executive Engineer, LI sub-division Gunupur	Member
17	Bharat Mohapatra	Assistant Engineer (Civil), LI sub-division Gunupur	Invitee
18	Soumendra Narayan Dash	Agriculture Officer , ITDA	Member
19	Mr. Siba Prasad Sahu	Assistant Regional Manager, WOTR	Member
20	Manoj Kumar Mallik	Agriculture Expert, WOTR	Invitee
21	Nikunja Kumar Bhoi	Agriculture Expert, WOTR	Invitee
22	Pramod Kumar Pradhan	TC,Harsad Trust	Invitee
23	Amarendra Chand	Coordinator Programme, Harsad Trust	Member
24	DamayantiPadria	Farm women	Member
25	Chandra ShekharSabara	Farmer	Member
26	Raghunath Gamango	Farmer	Member
27	Bibhu Prasad Satpathy	Reporter, DainikaAsha	Invitee
28	Dr. SangramParamguru	SSandH, KVK Gajapati	Invitee
29	Mrs. SushreeChoudhury	Scientist (Hort.), KVK Gajapati	Invitee
30	Kailash Chandra Gauda	Pratihar News	Invitee
31	Bhaskar Kumar Bauri	Bhaskar News	Invitee
32	Dr.(Mrs) SusmitaMohanty	Sr. Scientist and Head, K.V.K., Rayagada	Member convener

1	Mr. Rajib Tudu SMS(Plant Protection.),KVK, Rayagada
2	Dr. Naram Ramu SMS(Agro.),KVK, Rayagada
3	Miss. Himadri Bag. Scientist (Agrometrology)
4	Mr. ParimalTarai, Programme Assistant
5	Dr.(Mrs.) Sushree Choudhury, Scientist (Horticulture), KVK Gajapati.


17.01.2020
Sr. Scientist and Head
K.V.K. Rayagada



20th SAC Meeting on Dt.19.12.2024

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