

PROCEEDINGS OF THE 30th SCIENTIFIC ADVISORY COMMITTEE MEETING

KRISHI VIGYAN KENDRA, GANJAM-I

The 30th Scientific Advisory Committee (SAC) Meeting of KVK, Ganjam-I for the period 2021-22 was held on 08.03.2022 in the KVK campus on hybrid mode under the Chairmanship of Prof. Prasannajit Mishra, Dean Extension Education, Directorate of Extension Education OUAT, Bhubaneswar. Dr. S.K Mondal, Principal Scientist, ICAR-ATARI also attended the meeting virtually. All the SAC members including line dept. officials, representatives from NGOs, farmer's representative participated in the meeting on hybrid mode (List is attached in Annexure-1). The meeting was started with welcome address by Dr. Sutanu Kumar Satapathy, Sr. Scientist & Head. The Chairman, after a brief introductory remarks invited Sr. Scientist & Head to start the proceedings as per the agenda.

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

The proceeding of the last SAC meeting was presented by Senior Scientist and Head, KVK, Ganjam-I. As there were no modifications & objections reported by any members, the Chairman took the consent of all members and approved the proceedings.

Agenda-2: Action taken on the recommendation of last SAC

The Sr. Scientist & Head presented the following action taken report on the recommendations of last SAC meeting held on dt. 19.01.2021

Sl. No.	Salient Recommendation	Action Taken
1	Trials may be conducted to increase productivity of Ragi.	• FLD on high yielding Ragi variety “Arjuna” was conducted in 4.0 ha area involving 20 farmers in Kharif, 2021. • Two training programmes conducted.
2	Technology for wilt disease management in Solanaceous vegetable should be popularized.	• FLD on bacterial wilt resistant Brinjal variety Swarna Shyamali was conducted in 1.0 ha area involving 10 farmers in Kharif, 2021. Wilting decreased by 76% & yield increased by 17%. • One training programme conducted • FLD on Integrated disease management practices for wilt complex management in Brinjal was conducted in 2.0 ha area involving 10 farmers in Kharif, 2021. • One training programme conducted
3	Technology demonstration for utilization of spent mushroom straw for making composting	• FLD on vermicomposting by using spent mushroom straw was conducted involving 10 SHGs in Kharif, 2021. 2.4 q vermicompost/ pit in 03 month period was obtained & used in vegetable crops. • One training programme conducted

4	Trials may be conducted for enhancing yield in bittergourd.	• FLD on Integrated Nutrient Management in Bittergourd was conducted involving 10 farmers in Kharif, 2021. The No. of fruits/plant increased by 37 % & yield increased by 18 %. • One training programme conducted
5	Popularization of mechanical harvesting of non-paddy crop like Ragi/Millets.	• Demonstration on OUAT Ragi thresher cum pearler was conducted involving 10 farmers in Kharif, 2021. The threshing capacity increased by 86% & labour cost for threshing decreased by 81%. • One training programme conducted
6	Feed management in cattle for increasing milk production & milk fat percentage.	• OFT conducted on different fat sources (Oil cake and Bypass Fat Feeding) during kharif, 2021. • Health camp and awareness programme were organised on mineral mixture feeding and health management • Two training programmes conducted on nutritional management of dairy.
7	Popularization of Kadaknath breed of poultry.	• FLD conducted on Low Input Poultry Breed Kadaknath in Backyard. • Three training programmes conducted on backyard poultry and brooding management.
8	Popularization of Azolla cultivation for cattle & poultry feed.	• Three training programmes and 2 awareness programmes conducted on Azolla farming and livestock nutrition from non- conventional sources. • Azolla is being produced at KVK demo unit for training and demonstration purpose. • Azolla units were established at farmers level in collaboration with ARD Dept.
9	Creation & formation of FPO in collaboration with NGOs/NABARD.	• One FPO named (Rusikulya Vegetable Farmers' Producer Company Ltd.) was formed involving 1000 nos of farmers' by KVK with financial support of RKVY. Various capacity building training programmes along with technological demonstrations are being conducted. • KVK has also supported 2 more FPOs formed by different NGOs with financial support from NABARD. KVK has been involved in supporting/ nurturing technologically the newly formed FPOs by different CBBOs

10	Emphasis should be given on value addition of mushroom & millets.	- OFT conducted on value addition of Ragi (7 no SHGs). - FLD conducted on value addition of oyster mushroom. 2 Trainings conducted on value addition of mushroom & millets.
11	Value addition in fruits & vegetables.	- FLD conducted on value addition of soft type wild Jackfruit involving 10 farmers in Kharif, 2021. - One training on preparation of Tomato sauce has been conducted involving 25 nos women farmers. 27 SHGs are involved in the value addition training programme.
12	Crop diversification in Rainfed upland.	Two training programmes have been conducted on off-season cauliflower & off-season tomato cultivation involving 50 farmers in Kharif, 2021.
13	Emphasis should be given on convergence activities with line departments	Convergence with ATMA & other line departments for popularization of proven technologies through trainings, demonstrations, kisan mela & literature

Agenda-3: Achievements made by KVK

The Senior Scientist & Head presented OFTs, FLDs, Trainings & other extension activities during the period Rabi, 2020-21, Kharif, 2021 & Rabi , 2021-22.

a) OFT- KVK has conducted 11 nos. of OFT involving 77 numbers of participating farmers.

Sl. No.	Title of the OFTs	Significant achievements
1	Assessment of performance of brinjal varieties for bacterial wilt disease	Swarna Shyamai var. produced 21% more yield than farmers practice
2	Assessment of yield performance of different varieties of oyster mushroom	By cultivating Hypsizygus ulmarius, the yield increased by 29%.
3	Assessment of different planting time for better market price of tomato	Planting of seedlings 30 days before normal planting period resulted Rs. 126000/ha more profit than farmers practice.
4	Assessment on pre & post-emergence herbicides in DSR	Application of Bispyribac Na @ 7 DAS + Ethoxysulfuron @ 21 DAS recorded 86.5 % WCE resulting yield of 29.1 q/ha and yield increased by 20.6 % over control

5	Assessment of IPM practice against fall army worm in maize	Application of Neem pesticide(1500ppm) @ 1.5 lt./ha. at 20 DAS, Trichogamma @ 50000 eggs/ha., Chlorpyrifos + cypermethrin @ 1lt./ha., Beauveria bassiana @ 2kg/ha at tassel stage resulted yield of 43.1 q/ha which was 17.1 % more than farmer's practice
6	Assessment of IDM practices against false smut disease in rice	Seed treatment Carbendazim@2g/kg seed and spray-Azoxystrobin + Tebuconazole @750ml/ha. at Boot stage & after 10 days interval for management of false smut resulted an yield of 44.8 q/ha and increased yield by 17.2% over farmer's practice
7	Assessment of foliar application of plant growth regulators in chilli	Spraying of Triacntanol @ 1.25ml/liter at 40, 60 and 80th days of planting recorded a yield of 124.85 q/ha and the yield increased by 22.75%
8	Assessment of different fat sources (oil cake and bypass fat feeding) to increase milk yield and milk fat % in case of dairy cows	Grazing and Bypass fat feeding as fat source along with mineral mixture supplementation for cows resulted milk yield of 7.64 liters/day which was 63% more than farmer's practice.
9	Assessment of humidity management in paddy straw mushroom cultivation	Use of bundle paddy straw substrate (3 layers) + covering the floor with 2 inch sand in moist condition + installation of fogger system for mushroom production resulted an yield of 1.1 kg/bed which was 57.1% more than farmer's practice

b) **FLD-KVK** has conducted 26 FLDs (Rabi,2020-21 & Kharif 2021) involving 260 participating farmers under different crops & enterprises.

Sl. No	Title of the Front Line Demonstrations	Significant achievements
1	Post-emergence application of tembotrione in maize	Post emergence application of Tembotrione 100g/ha at 20 DAS resulted in 10.6 % more yield than farmers practice (manual weeding)
2	Management of wilt complex in brinjal	Seed treatment with Metalaxyl+Mancozeb 72% WP @ 2gm/kg + soil application of Carbofuran @ 33kg /ha+ soil drenching of Carbendazim 0.15%+ Streptocycline 0.015% at 30 and 45 days after transplanting produced 11 % more yield than farmers practice

3	Management of capsule borer in sesame	Alternate spraying of Neem (1500PPM) @ 1.5 lt./ha.& Spinosad @ 165 ml/ha at 15 days interval from pod initiation stage resulted in 16% more yield than farmers practice
4	Management of fruit fly in mango	Installation of methyl eugenol trap @ 20/ha and application of poison bait (Dichlorovos 20ml + jaggery 1Kg + 10lt. of water for 01 ha produced 12.5% more fruits than farmers practice
5	Honey bee rearing (<i>Apis cerana indica</i>)	Colony installation, management of Hive, feed management in adverse climatic condition resulted in Rs. 1850 profit/ box
6	Application of growth regulator in bittergourd	Foliar application of Ethrel & amino acids resulted in 18% more yield than farmers' practice.
7	Triple resistant tomato hybrid Arka Rakshak	By cultivating Arka Rakshyak var. the yield increased by 25%.
8	Concentrate feeding in pregnant does for reducing kid mortality (breed-ganjam)	Free ranging, Concentrate feeding @ 250g/day, supplement feeding resulted in 33% more body wt. gain than farmers practice
9	Hanging type grain cleaner with sack holder for drudgery reduction	Cleaning of rice by using hanging type grain cleaner the working efficiency increased by 18%.
10	Value addition of oyster mushroom	By mushroom pickle the net income increased by Rs.610/10 bed.
11	Yearlings production	Stocking fry 2 lakh/ha, Fry fed with de-oiled rice bran (crude protein: 12 to 15 percent) @ 2% biomass resulted 26 % more yield than farmers practice
12	Yearling stocking for yield enhancement in community pond	Yearling Stocking @ 5000/ha in Community pond with water quality management produced 44% more yield than farmers practice.
13	High yielding ragi variety	Cultivation of HYV Ragi var. Arjuna recorded yield of 16.5q/ha which was 61% more than local variety
14	Low dose herbicide molecules in transplanted rice	Application of Fenoxaprop-p-ethyl + ethoxysulfuron at 15 DAT controlled most of weeds in rice and recorded an yield of 39.1 q/ha which is 11.3% more than local variety
15	CLCC for real time nitrogen management in transplanted rice	Use of LCC at regular interval from 21 DAT (50% N as basal+ rest N at a regular interval based on LCC reading) resulted a yield of 41.4 q/ha and yield increased by 10.2% over farmer's practice

16	Management of vine rot (anthracnose) in yam	Tuber treatment with Carbandazim @ 2gram/lt, band placement of Trichoderma 2.5 kg + 30 kg vermicompost/ha and On appearance of disease soil drenching with Carbandazim @ 1kg/ha for management of anthracnose recorded yield of 242.4 q/ha which is 17.2% more than farmer's practice
17	Application of herbicide in okra	Pre-emergence application of Pendimethalin (2 lt/ha) + Post-emergence application of Quizalofop ethyle @ 1 lit./ha effectively controlled weeds and recorded a yield of 96.4 q/ha and yield enhanced by 21.7 % over manual weeding
18	Brinjal variety Swarna Shyamali	Cultivation of wilt tolerant variety Swarna Shyamali recorded yield of 297.7 q/ha which was 17.4% more than farmers cultivated variety Bharabi
19	Tomato hybrid Arka Rakshak	Cultivation of triple disease tolerant variety Arka Rakshak recorded yield of 391.8 q/ha which was 19.7% more than farmers cultivated variety
20	Hybrid napier (CO-4) fodder production in dairy farming	Cultivation of fodder hybrid napier resulted yield of 30 t/ha and feeding cow with napier recorded milk yield of 6.5 liter/day
21	Artificial brooding management in chicks (breed: Vanaraja)	Brooding for 21 days and vaccination with against RD, IBD, electrolytes, preventive antibiotics produced 50% more body wt. gain than farmers practice.
22	Low input poultry breed Kadaknath in backyard	Brooded Kadaknath chicks, semi-intensive rearing with scavenging have 52 % more body wt. gain than farmers practice
23	Cultivation of bio-fortified variety of sweet potato (Bhu Sona)	By cultivating Bio fortified Sweet potato var. Bhu Sona the yield increased by 18%.
24	Nutritional garden for improving nutritional security of farm family	Avg. per capita vegetable consumption per member (g/day) increased by 62% & additional income of Rs.550/unit
25	OUAT ragi thresher-cum-pearler	Operated by 1.0hp electric motor ,Output :: 80-85 kg/hr resulted in 83% increase in threshing capacity
26	Dry land power weeder in rabi vegetables	Power weeder with Capacity: 0.08-0.1 ha/hr (12.5 h/ha) ,Cost of operation: Rs 2000-2500/- per ha resulted in 72 % labour saving

c) Training- KVK has conducted 88 training programmes for practicing farmers & farm women, 16 trainings for rural youth and 8 nos. for in-service personnel.

d) Other extension activities- KVK organized 12 field days, 26 Group meetings, 2 Animal health camps, 08 Video shows, 6 method demonstrations, 9 News paper coverage, 2 exhibitions, 167 nos. Scientists visited to farmers field, 1,204 Farmers visited to KVK, 11 Swachhata campaigns done with 56 activities, 70 Kisan Mobile Advisory messages on different aspects have been delivered to 52426 farmers.

Agenda-4: Tentative Action plan for 2022-23

DETAILS OF ACTIVITY	TARGET
OFT	12
FLD other than Oilseed Pulse	23
FLD Oilseed Pulse	02 nos (Pigeonpea & Greengram)
Training	106
Ext. Activities	582
Newsletter	4
Soil Sample	200
KMAS	48

Agenda-5: Recommendation

The action points those are suggested and proposed by all the members of the SAC during the course of presentation is summarized and presented below.

- ✓ Popularization of Maize hybrid Kalinga Raj in farmer's field.
- ✓ Assessment of Chilli varieties tolerant to leaf curl virus.
- ✓ Awareness on natural farming/organic farming.
- ✓ Popularization of Sweet potato var. Bhu Krishna.
- ✓ Popularization of recent Pulse var. & incorporation of new generation insecticide for pod borer management.
- ✓ Steps to increase yield of Ragi.
- ✓ Focus on IFS with mushroom & Honey bee components.
- ✓ Value addition of tomato, Mushroom & Ragi.
- ✓ Demonstration on wilt tolerant var. of Tomato.
- ✓ Fodder cultivation both Seasonal & perennial.
- ✓ Promotion of backyard poultry with Kadaknath & other breed for livelihood.
- ✓ Promotion of FPOs for aggregation of various commodities in order to get better price realization.
- ✓ Popularization of mechanical harvesting of Ragi.
- ✓ Popularization of hydroponics fodder.
- ✓ Demonstration of power weeder in vegetable.

The meeting ended at 2 PM with vote of thanks by Mrs. Anita Patro, Scientist (Home Science).

Sd/

**Senior Scientist & Head
KVK, Ganjam-I**

**Dean, Extension Education
OUAT, Bhubaneswar**

List of participants of 30th SAC meeting
Annexure –I

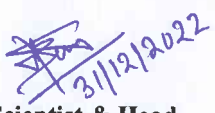
Sl. No	Dignitaries	Designation
1	Prof. Prasannajit Mishra, Dean, Extension Education, OUAT, Bhubaneswar	Chairman
2	Dr. Siba Prasad Sangramsingh Joint Director Extension, DEE, OUAT, Bhubaneswar	Co-Chairman
3	Dr. S,K Mondal, Principal Scientist, ICAR-ATARI, Kolkata	Member Representative of ATARI
4	Dr. Gobinda Acharya Principal Scientist & Head, CHES, Bhubaneswar	Member
5	Sri Sashibhusan Senapati, ADO, Bhanjanagar	Member Representative of C.D.A.O, Ganjam
6	Sri Subhendu Kumar Das PD, Watershed, Ganjam	Member
7	Dr. Pradeep Kumar Sahu, S.D.V.O, Bhanjanagar	Member
8	Sri Sudhansu Sekhar Sahoo Asst. Fisheries Officer, Bhanjanagar	Member
9	Dr. M.Nedunchezhiyan Head, CTCRI	Member
10	Dr. Sanjib Mishra DDM, NABARD	Member
11	Dr. Debendra Kumar Debata ADR,RRTS,G.Udayagiri	Member
12	Smt.Sunita Gouda Farm Women	Member
13	Smt.Santoshi Bisoyi Farm Women	Member
14	Sri Banamali Sahu Farmer	Member
15	Sri Balakrushna Swain Farmer	Member
16	Smt. Bishnupriya Sethi CDPO, Bhanjanagar	Member
17	Dr. Narayan Bar Senior Scientist & Head, KVK, Kandhamal	Invitee
18	Sri Dibya Ranjan Majhi Asst. Agriculture Officer, Bhanjanagar	Invitee
19	Sri Sudhansu Sekhar Tripathy Coordinator, PLUS NGO Bhanjanagar	Invitee
20	Sri Asit Chandra Sahu Coordinator, B.MASS NGO Bhanjanagar	Invitee
21	Dr.Prasanta Kumar Panda Scientist(Agro)CPR, Berhampur	Invitee
22	Sri Prasanta Kumar Panda Scientist (Plant Protection)	Invitee
23	Mrs.Anita Patro Scientist (Home Sc.)	Invitee
24	Sri Bishnupada Giri Scientist (Horticulture)	Invitee
25	Dr.Santosh Kumar Samantaray Scientist (Ag.Extn.)	Invitee
26	Dr.Siddharth Ranabijuli Scientist (Animal Sc.)	Invitee
27	Sri Satyabrata Mangaraj SMS(Agronomy)	Invitee
28	Dr. Sutanu Kumar Satapathy Senior Scientist & Head	Member Convener

Agenda-5: Recommendation

All the action points those are suggested and proposed by the Chairman, Principal Scientist, ATARI, Kolkata along with the key note remarks by other members of the SAC during the course of presentation is summarized as presented below.

- ✓ Popularization of Maize hybrid Kalinga Raj in farmer's field.
- ✓ Assessment of Chilli varieties tolerant to leaf curl virus.
- ✓ Awareness on natural farming/organic farming.
- ✓ Popularization of Sweet potato var. Bhu Krishna.
- ✓ Popularization of recent Pulse var. & incorporation of new generation insecticide for pod borer management.
- ✓ Steps to increase yield of Ragi.
- ✓ Focus on IFS with mushroom & Honey bee components.
- ✓ Value addition of tomato, Mushroom & Ragi.
- ✓ Demonstration on wilt tolerant var. of Tomato.
- ✓ Fodder cultivation both Seasonal & perennial.
- ✓ Promotion of backyard poultry with kadaknath & other breed for livelihood.
- ✓ Promotion of FPOs for aggregation of various commodities in order to get better price realization.
- ✓ Popularization of mechanical harvesting of Ragi.
- ✓ Popularization of hydroponics fodder.
- ✓ Demonstration power weeder in vegetable.

The meeting was concluded at 2 PM with vote of thanks by Mrs. Anita Patro, Scientist (Home Science).


Senior Scientist & Head
KVK, Ganjam-I

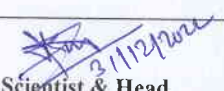
SENIOR SCIENTIST & HEAD
KVK, GANJAM-I, BHANJANAGAR

Dean, Extension Education
OUAT, Bhubaneswar

List of participants of 30th SAC meeting

Annexure -I

Sl. No	Dignitaries	Designation
1	Prof. Prasannajit Mishra, Dean, Extension Education, OUAT, Bhubaneswar	Chairman
2	Dr. Siba Prasad Sangramsingh Joint Director Extension, DEE, OUAT, Bhubaneswar	Co-Chairman
3	Dr. S.K Mondal, Principal Scientist, ICAR-ATARI, Kolkata	Member Representative of ATARI
4	Dr. Gobinda Acharya Principal Scientist & Head, CHES, Bhubaneswar	Member
5	Sri Sashibhusan Senapati, ADO, Bhanjanagar	Member Representative of C.D.A.O, Ganjam
6	Sri Subhendu Kumar Das PD, Watershed, Ganjam	Member
7	Dr. Pradeep Kumar Sahu, S.D.V.O, Bhanjanagar	Member
8	Sri Sudhansu Sekhar Sahoo Asst. Fisheries Officer, Bhanjanagar	Member
9	Dr. M.Nedunchezhiyan Head, CTCRI	Member
10	Dr. Sanjib Mishra DDM, NABARD	Member
11	Dr. Debendra Kumar Debata ADR,RRTTS,G.Udayagiri	Member
12	Smt.Sunita Gouda Farm Women	Member
13	Smt.Santoshi Bisoyi Farm Women	Member
14	Sri Banamali Sahu Farmer	Member
15	Sri Balakrushna Swain Farmer	Member
16	Smt. Bishnupriya Sethi CDPO, Bhanjanagar	Member
17	Dr. Narayan Bar Senior Scientist & Head, KVK, Kandhamal	Invitee
18	Sri Dibya Ranjan Majhi Asst. Agriculture Officer, Bhanjanagar	Invitee
19	Sri Sudhansu Sekhar Tripathy Coordinator, PLUS NGO Bhanjanagar	Invitee
20	Sri Asit Chandra Sahu Coordinator, B.MASS NGO Bhanjanagar	Invitee
21	Dr.Prasanta Kumar Panda Scientist(Agro)CPR, Berhampur	Invitee
22	Sri Prasanta Kumar Panda Scientist (Plant Protection)	Invitee
23	Mrs.Anita Patro Scientist (Home Sc.)	Invitee
24	Sri Bishnupada Giri Scientist (Horticulture)	Invitee
25	Dr.Santosh Kumar Samantaray Scientist (Ag.Extn.)	Invitee
26	Dr.Siddharth Ranabijuli Scientist (Animal Sc.)	Invitee
27	Sri Satyabrata Mangaraj SMS(Agronomy)	Invitee
28	Dr. Sutanu Kumar Satapathy Senior Scientist & Head	Member Convener


 Senior Scientist & Head

 SENIOR SCIENTIST & HEAD
 KVK, GANJAM-I, BHANJANAGAR