

Proceedings of the Annual Zonal Workshop of KVKs, 2015-16 organized by ICAR-ATARI, Zone-III, Umiam, Meghalaya in collaboration with FSADD and HCCDD, Govt. of Sikkim

(April 22-24, 2016)

The Annual Zonal Workshop 2015-16 of KVKs under Zone-III was organized by the ATARI (Zone-III) in collaboration FSADD, Sikkim during **22nd to 24th April, 2016** at the Chintan Bhavan, Gangtok, Sikkim. Over 120 participants from different organizations including Programme Coordinators of KVKs under Zone-III, representatives from the Division of Agricultural Extension, ICAR, New Delhi, Assam Agricultural University, Jorhat, Assam, ICAR Sikkim Center, Sikkim, Central Agricultural University, Imphal, Directorates of Agriculture, Govt. of Mizoram, Sikkim, Arunachal Pradesh and Nagaland besides Scientists/staff from ATARI-III, Umiam, Meghalaya participated in the programme. The workshop comprised of an inaugural session, technical sessions and interaction cum valedictory session.

Inaugural session

The inaugural session was held on **22nd April, 2016** where Sri Somnath Podyal, Hon'ble Minister of FSADD & HCCDD, Govt. of Sikkim was the chief guest. In his speech, Sri Podyal expressed happiness for organising such an important event of KVKs in the State of Sikkim and emphasized on agriculture for more innovative, economically rewarding and intellectually stimulating, especially the youth in the region to take up agriculture as an occupation for employment generation and sustainable income. He further stressed upon nutritious food with the available land and judicious use of water and other critical inputs through organic farming. Shri Khorlo Bhutia, Secretary, FSADD and HCCDD, Govt. of Sikkim, Prof. M Premjit Singh, Hon'ble Vice-Chancellor, Central Agricultural University, Imphal, Dr. V.S. Thakur, Hon'ble Vice-Chancellor, YS Parmar University of Horticulture & Forestry, Himachal Pradesh and Dr. N.S Rathore, DDG (Education), ICAR New Delhi were the dignitaries who graced the occasion. The welcome address was given by Dr. Bidyut C. Deka, Director ATARI, Zone III. In his speech, the Director appraised about the current thrust areas of KVKs under Zone III and the themes and the objectives of the workshop. The formal Vote of thanks was proposed by Shri A.K. Thapa, Director, FSADD, Govt. of Sikkim.

The technical sessions were conducted in two groups. Detailed presentations on achievements for the year 2015-16 and the Action plan of KVKs for the year 2016-17 were made by individual Programme Coordinators of KVKs. Dr H C Bhattacharryya, Director of Extension Education, AAU Jorhat, Dr A. K. Tripathi ,Head, Division of Social Science, ICAR Research Complex for NEH

Region, Barapani, Dr. A.K. Singha, Principal Scientist, ATARI, Zone-III acted as Chairman and Co-Chairman in different technical sessions of the workshop. A colourful cultural Programme was also arranged by KVKs-South Sikkim, West Sikkim and North Sikkim in honour of the participating Guests.

Followings are the Action Points/ recommendations to be taken up by KVKs as per approved guidelines-

Sl. No.	Recommendation
1.	All the information related to the OFT/FLD need to be indicated in presentation like variety, Date of sowing etc. (Action: KVK, Changlang)
2	The economics of cage culture need to be calculated (Action: KVK, Bongaigaon)
3	The role of KVK should be strengthened in prioritized areas based on farmers problems and potentials (Action: KVK, Churachandpur)
4	i. OFT under Horticulture should be converted to FLD as it has already been proven. ii. B:C ratio should be corrected in Fishery iii. Degree of acceptance should be quantified in significant achievement (Action: KVK, East Khasi Hills)
5	i. In OFT or FLD plant population, spacing etc. should be maintained properly ii. IPM in chilli should be rechecked (Action: KVK, Mamit)
6	i. The yield of rice variety CAUR-1 needs to be rechecked. ii. Recommended practices should be followed in all crop production. (Action: KVK, Kohima)
7	i. Suggested to popularize the cropping pattern for achieving 300% cropping intensity across the district. ii. FLD on value added product of chaw chaw should be conducted. (Action: KVK, East Sikkim)
8	i. Brinjal variety developed by ICAR Centre may be considered for OFT/FLD ii. Tomato Variety Arka Rakshak should be brought under FLD (Action: KVK, Dhalai)
9	The OFT conducted for 2 years or the proven technology should be brought under FLD (Action: KVK, East Siang)
10	Artificial Insemination in pig need to be emphasized and promoted. (Action: KVK, Imphal West)
11	i. Suggested to take OFT on pruning of peach ii. In fruit crop, experiment number of plants should be more under OFT and FLD (Action: KVK, Ribhoi)
12	i. No. of FLD should be increased ii. Impact should be quantified (Action: KVK, Champai)
13	Toria variety M-27 should be replaced with New high yielding variety (Action: KVK, Dhemaji)
14	i. Yield of Mandarin in FLD and Banana in OFT may be checked.

	<ul style="list-style-type: none"> ii. Rabbit rearing possibility should be explored. iii. Economics part of Potato FLD is to be recalculated consulting with an economist. iv. Azolla village is to be monitored by concerned authority. <p style="text-align: right;">(Action: KVK Lower Dibang Valley)</p>
15	<ul style="list-style-type: none"> i. OFT in brown spot in Rice – One HYV to be selected and to be discussed with AAU. ii. Main crop and its problem to be considered while selecting OFT and FLDs. <p style="text-align: right;">(Action: KVK, Papumpare)</p>
16	<p>Effective marketing channel should be reported.</p> <p style="text-align: right;">(Action: KVK Dibrugarh)</p>
17	<ul style="list-style-type: none"> i. Economics in Rice OFT to be checked/ worked out. ii. Green manuring of Soybean FLD should be written properly (Title). <p style="text-align: right;">(Action: KVK, Serchhip)</p>
18	<ul style="list-style-type: none"> i. Chewing variety of sugarcane should be selected. ii. Maize yield in OFT is very low. Should be checked. <p style="text-align: right;">(Action: KVK, Mon)</p>
19	<ul style="list-style-type: none"> i. In OFT, composition of items in place of trade name to be indicated. ii. Significant achievement to be indicated with quantification of impact. <p style="text-align: right;">(Action: KVK, Lawngtlai)</p>
20	<ul style="list-style-type: none"> i. Baby corn OFT to be replaced with some other corn varieties. ii. Varietal assessment in Soybean to be started initially. iii. In all OFTs, treatment should be revised and problem may be redefined. iv. Citrus, Ginger OFT (PP) – yield data to be checked. v. OFT – Fishery in carp seed rearing - to be revised. vi. In FLD, yield of local checked of turmeric to be worked out properly. <p style="text-align: right;">(Action: KVK, West Khasi Hills)</p>
21	<ul style="list-style-type: none"> i. Crop failure in butter bean OFT to be studied. ii. Sowing time of crops to be maintained properly. <p style="text-align: right;">(Action: KVK Tuensang)</p>
22	<ul style="list-style-type: none"> i. Water savings in SRI to be mentioned. ii. Ginger OFT to be conducted in second year and then put under FLD. iii. Convey message to the Agricultural department that without validation of technology, it should not be distributed to the farmers. <p style="text-align: right;">(Action: KVK South Sikkim)</p>
23	<ul style="list-style-type: none"> i. Submergence tolerant rice varieties to be tested again as there was no flood during 2015. ii. Traditional bamboo walker to be put under FLD. iii. Significant achievement to be quantified. <p style="text-align: right;">(Action: KVK Golaghat)</p>
24	<ul style="list-style-type: none"> i. Maize yield in OFT to be calculated again. Suggested to close down the maize OFT with hybrid varieties. ii. Screening of varieties in ginger is needed. iii. OFT under Extension discipline need to be dropped. iv. “Rachna” variety of Pea to be replaced by some new varieties. <p style="text-align: right;">(Action: KVK Zunheboto)</p>
25	<ul style="list-style-type: none"> i. Treatment in blackgram OFT to be revised. ii. In Banana OFT problem, intervention and title should be redefined as these are mismatching. iii. M-27 of Rapeseed should not be included in FLD under varietal programme. <p style="text-align: right;">(Action: KVK Tamenglong)</p>
26	<ul style="list-style-type: none"> i. Major crops in pulses should be selected under OFT/ FLD programmes. ii. Economics in Toria OFT to be studied again. iii. Dose of Rhizobium in FLD on Pea is very low. iv. Age of green manure crops at the time of incorporation needs to be proper.

	(Action: KVK Tirap)
27	<ul style="list-style-type: none"> i. Title of OFT should be (Pea) redefined. ii. Revise the treatment with respect to problem in orange. Maintain complete module in Citrus decline. iii. For organic cabbage cultivation package of organic cultivation to be tested. iv. OFT on Soybean milk needs to be modified. v. Composting in plastic bucket FLD need to be studied for its feasibility. vi. FLD on Pig – data should be indicated properly <p style="text-align: right;">(Action: KVK Upper Subansiri)</p>
28	<ul style="list-style-type: none"> i. Title in seed production of cowpea pea need to be redefined. ii. Seed production may be included in FLD/ Seed production programme. iii. More extension activities are needed. <p style="text-align: right;">(Action: KVK West Siang)</p>
29	<p>Average yield in FLD for crops to be corrected.</p> <p style="text-align: right;">(Action: KVK Karbianglong)</p>
30	<ul style="list-style-type: none"> i. Title of biological suppression should be replaced with suitable one. ii. In Sesamum FLD, new HYV may be demonstrated in place of local. iii. Zero energy cool chamber new model developed by AAU need to be demonstrated. <p style="text-align: right;">(Action: KVK Kokrajhar)</p>
31	<ul style="list-style-type: none"> i. Title, treatment and problem in banana OFT may be written problem. ii. Need some new varieties in rice in place of Ranjit under FLD. <p style="text-align: right;">(Action: KVK Nagaon)</p>
32	<p>Organic rice cultivation to be conducted for another one more year under OFT.</p> <p style="text-align: right;">(Action: KVK Lakhimpur)</p>
33	<ul style="list-style-type: none"> i. INM in wheat may be considered for FLD programme. ii. Performance of Biofor-PF to be assessed properly. iii. AI in pig should be reported as significant achievement. iv. OFTs and FLDs should be documented with proper photograph <p style="text-align: right;">(Action: KVK Sonitpur)</p>
34	<ul style="list-style-type: none"> i. Plat population in King Chillies is to be maintained. ii. “Amur Carp” should be tried under Fishery. iii. Prunning in Kiwi should be taken as OFT programme. <p style="text-align: right;">(Action: KVK Lower Subansiri)</p>
35	<ul style="list-style-type: none"> i. Another blackgram variety along with PU-19 may be tested. ii. Winter paddy – Gitesh may be promoted iii. In zero tillage in Toria – rice need to be transplanted in line.. <p style="text-align: right;">(Action: KVK Tinsukia)</p>
36	<ul style="list-style-type: none"> i. Modes of marketing to be studied with three modes and calculate the economics (SHG, PPP, Individual etc.) ii. Economics of banana FLD should be checked and verified. iii. Yield of mushroom per bag is found low. Check the results <p style="text-align: right;">(Action: KVK Udalguri)</p>
37	<ul style="list-style-type: none"> i. OFT on Zebra fish breeding should not be considered. First it should be standardised then OFT. ii. A report on black rice in details should be submitted as significant achievement iii. Organic plot should not be adjacent to tea garden. iv. Budded or grafted plants of Khasi mandarin may be taken with tea plant <p style="text-align: right;">(Action: KVK Goalpara)</p>
38	<ul style="list-style-type: none"> i. The Data on Value addition in Soybean should be incorporated in the report as the OFT cannot be ongoing ii. FLD on intercropping needs correction iii. Field pea variety may not be taken as garden pea variety. iv. Rice varieties Balum-3 and Balum-4 should be considered instead of Balum-1 <p style="text-align: right;">(Action: KVK West Kameng)</p>

39	<ul style="list-style-type: none"> i. Acceptability test should be done for soybean Pioneer making. ii. In varietal evaluation of cabbage only one variety should be considered. iii. Drip irrigation should be clubbed with the water harvesting structure. iv. The seed rate of rice variety CAU R1 in ICM experiment should be 35kg/ha v. Old variety Rachna should not be taken in KVK Programme. ICAR may provide new variety like Prakash. vi. Revise the stem rot management intervention with potash as basal dose. <p style="text-align: right;">(Action: KVK Imphal East)</p>
40	<ul style="list-style-type: none"> i. Necessary correction is required for yield and price data of Lentil OFT. ii. Verify the economy of all OFT. <p style="text-align: right;">(Action: KVK Karimganj)</p>
41	<ul style="list-style-type: none"> i. Biofertilizer dose not have any effect on pH so parameters should be revised. ii. Composite maze variety is to be replaced. iii. Ground nut variety JL-24 is to be replaced by improved pea variety iv. Cluster demonstration report to be submitted. <p style="text-align: right;">(Action: KVK Phek)</p>
42	<ul style="list-style-type: none"> i. Number of treatment in OFT should not exceed 3 (three). ii. SRI technology may be taken up as a awareness programme. iii. Azospitilium and PSB treatment may be clubbed together. iv. Stalking density for carry over seeds is to be verified. <p style="text-align: right;">(Action: KVK West Tripura)</p>
43	<ul style="list-style-type: none"> i. Paddy variety Mehga 1 and Megha 2 may be taken up under rice-toria relay cropping. ii. OFT in chick pea may be dropped. iii. Under OFT Extension network treatment to be revised as refinement. <p style="text-align: right;">(Action: KVK Tawang)</p>
44	<ul style="list-style-type: none"> i. Repeat the OFT on submergence of rice is to be replaced. ii. Revise the yield data of OFT Wheat iii. 10 ton/ha FYM in paddy culture is not a viable treatment. iv. FLD on Cucurbits should be under IMP module. <p style="text-align: right;">(Action: KVK Dhubri)</p>
45	<ul style="list-style-type: none"> i. Biofertilizers may be taken up as treatment in place of Vermicompost and FYM in paddy OFT. ii. In FLD on Nutritional diet for children and pregnant women, Assam Mix is recommend <p style="text-align: right;">(Action: KVK Lunglei)</p>
46	<p>Success story on Magur breeding /floriculture should be documented and submit to ATARI</p> <p style="text-align: right;">(Action: KVK Nalbari)</p>
47	<ul style="list-style-type: none"> i. Training in Azolla should be organized ii. OFT on pond utilization should be converted to FLD iii. Parameter on water quality should be assessed iv. Massive programme on citrus decline should be undertaken <p style="text-align: right;">(Action: KVK East Kameng)</p>
48	<ul style="list-style-type: none"> i. OFT on nutritional gardening should be converted to FLD ii. In management of bacterial wilt in Tomato new technologies should be tried iii. Turmeric pickle OFT should be discontinued iv. Technologies demonstrated in FLD on Agronomy should be specified <p style="text-align: right;">(Action: KVK Aizawl)</p>
49	<p>Success story on fiber production should be documented and submit to ATARI</p> <p style="text-align: right;">(Action: KVK Dimapur)</p>
50	<p>OFT on conoweeder and maize sheller should be taken up in FLD</p> <p style="text-align: right;">(Action: KVK Lohit)</p>
51	<ul style="list-style-type: none"> i. OFT on plastic mulching should be taken up in FLD

	ii. OFT should be taken on swarna sub –I and Ranjit sub-I (Action: KVK Hailakandi)
52	i. OFTs on paddy cum fish culture and light trap should be taken up in FLD ii. Maize equivalent yield should be mentioned in FLD on intercropping (Action: KVK Jaintia Hills)
53	i. Natural dye should be taken up in OFT ii. Before taking up any FLD on any new chemical OFT should be conducted iii. FLD on fish cum paddy culture species of fish should be changed (Action: KVK Thoubal)
54	i. OFTs on Paddy and mustard should be clubbed together ii. Data of OFT on Broccoli should be rechecked (Action: KVK Barpeta)
55	i. OFT on use of black pepper in grain storage should be taken up ii. Megha Turmeric should be taken up in OFT (Action: KVK West Sikkim)
56	i. OFT data should be rechecked ii. No. of OFT should be increased (Action: KVK Mokokchung)
57	OFT on acceptance of Soya ponner should be taken up (Action: KVK Bishnupur)
58	Data of OFT on submergence rice should be rechecked (Action: KVK Darrang)
59	Disease and pest data should be recorded with proper methodology (Action: KVK Kolasib)
60	Yield data should be verified in OFT on Strawberry and report accordingly (Action: KVK Saiha)
61	Data should be checked before presenting in Zonal Workshop (Action: KVK Morigaon)

GENERAL RECOMMENDATIONS

- Significant achievements of KVKs should be documented properly and submitted to the ATARI, Zone III for further documentation and publication.
- Adequate attention should be given to update the knowledge of extension functionaries about recent developments in technologies.
- Problems diagnosed for all OFTs should be properly placed and matched with the technologies to be addressed.
- The technology selected for OFTs should not be taken for FLD at the same time.
- All the data generated through the OFTs/FLDs should be verified properly by concerned PCs of KVKs.
- In Plant Pathological trials, disease incidence/ severity should be recorded properly.
- Knowledge of all SMSs should be updated through HRD programmes at ATARI level.
- Income generated from additional cost investment for a treatment should be calculated and to be reported accordingly

- Considering the importance of B:C ratio in OFTs or FLDs, it should be calculated with utmost care.
 - GPS information for OFTs or FLDs should be properly recorded and reported.
 - All the KVKs should try for outsourcing fund for development and well functioning of KVKs.
 - Fishery HRD proposals should be submitted to the NFDB for financial assistance
 - Prior permission from concerned authority is required to test company/ private products like varieties, chemicals etc.
 - All the data on fishery science should be submitted to ATARI
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