

# **Proceedings of Annual Zonal Review Workshop of KVKs of Rajasthan, Haryana and Delhi**

(Organized by ICAR-ATARI, Zone-II Jodhpur at SKRAU, Bikaner from 10 to 12 June, 2018)

Annual Zonal Review Workshop for KVKs of Rajasthan, Haryana & Delhi was organized by ICAR-ATARI, Zone-II, Jodhpur at Swami Keshwanand Rajasthan Agricultural University (SKRAU), Bikaner from 10-12 June, 2018. The major objective of this workshop was to critically review performance and progress of previous year activities and finalization of Action Plan for 2018-19.

Dr S.K. Sharma, Director of Extension Education, SKRAU, Bikaner welcomed the delegates. He said, KVKs are becoming knowledge and resource centre at district level. These centres are responsible for spreading awareness about new agricultural technologies and policies among farmers.

While addressing the gathering, Dr. B.R. Chippa, VC, SKRAU, Bikaner appealed to the KVKs to promote high value crops. He suggested for spreading awareness on soil health card and to publish the major research findings into the local language.

Dr. S.K. Singh, Director, ICAR-ATARI, Jodhpur in his address described KVKs as main frontlines extension programme of Indian Council of Agricultural Research to develop capacity among various stakeholders engaged in agriculture. He also emphasis, KVKs should use changing approaches and methodologies to meet the diverse needs and interest of the farmers and farm women. He said, for implementation of the programmes and schemes, KVKs are playing critical role by linking research and extension system. He also emphasised to increase seed replacement rate through newly created seed hubs in the country. He urged to produce the seed in participatory mode with partner farmers.

Total 12 publications including Farmers Innovation: Fostering Convergence of ICAR-ATARI, Jodhpur & Value Addition in Aonla of KVK Hanumangarh-II (Rajasthan) has been released during the workshop.

Dr N.P. Singh, Director, ICAR-IIPR, Kanpur, Dr A.K. Tomar, Director, CSWRI, Avikanagar and Dr Gopal Lal, Director, NRCCS, Ajmer also shared their experiences and interacted with the KVKs scientists for future collaborations.

All the Directors of Extension Education from State Agricultural Universities of Rajasthan and Haryana, 62 Senior Scientist and Head from all KVKs, Dean and Directors from SKRAU have participated in the zonal workshop.

The progress of KVKs was presented by respective Senior Scientist and Head in the technical sessions. The Session wise presentation and comments/suggestions are given below for the further necessary action by KVKs.

### **Technical Session-I**

**Chairman : Dr B.R. Chippa, VC, SKRAU, Bikaner**

**Co-Chairman: Dr. S.K. Singh, Director, ICAR-ATARI, Jodhpur**

**Rapporteur : Dr. M.S. Meena, PS (AE)**

Presentations were done by the invited guest speakers from Director of ICAR institutions and other organizations on technological breakthrough on crops, livestock, spices and NRM.

1. Dr. AK Tomar, Director, ICAR-Sheep & Wool Research Institute, Avikanagar (Tonk)
2. Dr. Gopal Lal, Director. ICAR-NRCSS, Ajmer
3. Dr. P.L. Saroj, Director, ICAR-CIAH, Bikaner
4. Dr. N.P. Singh, Director, ICAR-IIPR, Kanpur

Under this session, a brief presentation on functional & administrative problems and other issues were done by following Directors of Extension Education from State Agricultural Universities.

1. Dr. S.K. Sharma, SKRAU, Bikaner
2. Dr. G.C. Tiwari, MPUAT, Udaipur
3. Dr. G.S. Bangarwa, SKNAU, Jobner
4. Dr. K.M. Gautam, AU, Kota
5. Dr. Ishwar Singh, AU, Jodhpur
6. Dr. R.S. Hudda, CCSHAU, Hisar
7. Representative from RAJUVAS

### **Technical Session-II**

**Chairman : Dr. S. K. Singh, Director, ICAR-ATARI, Zone-II, Jodhpur**

**Co chairman : Dr. Ishwar Singh, DEE, AU, Jodhpur,**

**Rapporteurs : Dr. V. K. Saini, SS&H, KVK, Churu-I**

**Dr. Virendra Singh, SS&H, KVK, Sirohi**

In this session, a total of 18 KVK (ICAR-5, MPUAT Udaipur-7 and AU Kota-6) presented their progress report. KVKs functioning under ICAR institutes presented the progress. The comments and suggestion are presented as:

### **KVK, Jodhpur-I**

- There is need to work out the cost of cultivation for all CFLDs.
- Discourage the groundnut cultivation in Jodhpur district.
- Need to verify the data (economics) in the demos of animal science.
- Need to elaborate technical observation of OFTs.
- Need to put interventions on livestock in the field.
- IFS model need to be established within Six months.
- Success stories are required to be prepared & submitted.

### **KVK, Pali**

- Mention the number of tillers in wheat trials
- Need to motivate home scientist to analyze problems of farm women and conduct trials accordingly
- Take only two treatments in OFTs instead of four.
- IFS model need to be established within Six months.
- Success stories are required to be prepared & submitted.

### **KVK, Alwar-II**

- Need to check the cost of cultivation of the mustard and wheat demonstrations.
- Need to mention the dose of fertilizers in balanced nutrition of mustard.
- Need to check the farmers' practice in OFTs on animal science
- Need to document technical, economical and farmers perception on OFTs/FLDs.
- IFS model need to be established within Six months.
- Success stories are required to be prepared & submitted.

### **KVK Gurugram**

- Need to recheck the B:C ratio and yield levels in OFT of wheat.
- Redesign the OFTs on nematode management in Bottle gourd.
- Need to consider the home science OFT as demonstration.

- IFS model need to be established within Six months.
- Success stories are required to be prepared & submitted.

#### **KVK, Karnal**

- KVK should focus on integrated programme of all discipline than animal science or dairy trainings.
- Need to seek help from Division of Dairy Extension for technical backup and efficiently documentation of success cases and field activities.
- More emphasis should be given to provide technical support to farmers of Karnal rather another district.

#### **KVK, Banswara**

- Need to check the dose of RDF and biofertilizer in soybean
- Need to revise the impact study slides of various activities.
- IFS model need to be established within Six months.
- Success stories are required to be prepared & submitted.

#### **KVK Bhilwara**

- Need to give more emphasis on ICAR activities than sponsored programme.
- Need to re-check the sale price of pulses and sesame mentioned in presentation
- Need to rectify the dose of biofertilizer in seed inoculation.
- IFS model need to be established within Six months.
- Success stories are required to be prepared & submitted.

#### **KVK, Rajsamand**

- Need to check the biofertilizer dose for seed inoculation
- Need to redesign home science OFTs after proper need assessment of farm women.
- More horticultural and livestock interventions are to be undertaken.

#### **KVK, Chittorgarh**

- Need to recheck yield data of CFLDs presented and dose of biofertilizer for seed inoculation.
- Technical observations should be mentioned properly.

- Economics of horticulture orchards must be worked out.
- Ensure availability of plants of fruits and seedling of tomato, chillie, birnjal etc.

### **KVK Dungarpur**

- Need based training should be organized.
- Need to mention the detail cost of cultivation in two parts i.e. 1. Input cost and 2. Labour cost.
- More emphasis on horticulture & livestock interventions.

### **KVK, Pratapgarh**

- Need to utilization of fund of CFLDs in a rationalized manner.
- Modify the training titles.
- Use of chlorpyrifos as foliar spray in mustard be checked
- Same variety should not be taken in CFLDs/FLDs and OFTs.

### **KVK, Sawaimadhopur**

- Need Assessment must be highlighted.
- Use of fruit fly trap in both OFTs and FLDs should be avoided
- Rationalized of fund in CFLDs is needed.
- Need to cover entire district under CFLDs.
- Livestock interventions should be given due importance.

### **KVK, Karauli**

- Need assessment must be highlighted.
- New varieties should be used in demonstrations of fodder crop.
- Grain yield should be mentioned in place of seed yield.
- Horticultural & livestock based intervention are to be undertaken.

### **KVK, Kota**

- Line to line spacing in mustard should be kept 45 cm instead of 30.0 cm
- Same variety should not be taken in FLDs and OFTs.
- Perception of tribal farmers should be recorded
- Need to change the garlic OFTs since the root rot may be due to over irrigations.

- Impact assessment must be presented.

### **KVK, Bundi**

- Need to check the FLD observations as number of pod per plant in Chickpea.
- IPM modules must be popularized amongst farmers under pulses & vegetables.
- Livestock based interventions must be undertaken on large scale.

### **KVK, Jhalawar**

- Need assessment of farmers, farm women & rural youths must be done.
- To fulfill targets of seed hub for production of seed, need to motivate farmers for cultivation of field pea.
- Rationalized use of all critical inputs in CFLDs is needed for proper use of budget.
- Soil sample analysis must be done on regular basis.

### **KVK, Baran**

- Need to identify the reasons for use of high seed rate by farmers as mentioned in presentation.
- Need to conduct component demos for the same.
- More emphasis on horticultural & Live Stock interventions.
- Proper recording of technical observations.

### **KVK, Bharatpur**

- Livestock discipline must intensify the trainings and OFTs
- Looking to the increased area in potato in the district, few FLDs may be conducted with advanced PoP as per available budget.
- Planting material production should be presented.
- Good quality photographs, sign board and banners need to be displayed.

### **KVK, Sikar**

- Since the SMSs have been recruited in KVKs, hence activities of KVK need to be intensified for each SMS.
- Hindi font may not be included the PPT and be ensured before coming for presentation.
- Planting material production must be taken up.

- Livestock based interventions must be undertaken on large scale.

### **KVK, Dausa**

- Presentation should be improved and should avoid copy paste from word file
- Planting material production must be taken up at KVK.
- Live-stock based interventions must be covered in the interest of farming community.

### **KVK, Jaipur-II**

- The construction work must be speed up at KVK.
- KVK must intensify the activities as new SMSs have recently joined.
- Farmers' varieties must be registered as per PPV&FRA.

### **KVK, Dholpur**

- Presentation required improvement especially photos and banners
- KVK must intensify the KVK activities as new SMSs recently joined.
- Live-stock, horticulture based interventions must be undertaken.

### **KVK, Churu-II**

- Planting material production must be taken up with development of small nursery.
- Soil & water testing analysis of KVK farm as well as farmers must be taken up.
- Horticulture based interventions need more emphasis.

### **KVK, Bikaner-II**

- KVK must intensify the KVK activities as new SMSs recently joined.
- Action photos must be included in PPT slides
- Farmer's practice must be presented in details.
- Treatments in some of the OFTs must be revised in farmers participation mode.
- Soil & water testing analysis of KVK farm as well as farmers must be taken up.

### **KVK, Jaisalmer-II**

- Requires lots of improvements including action photographs, slides of all the activities.
- Only latest varieties must be incorporated in FLDs as well as on farm.

- Soil & water testing analysis of KVK farm as well as farmers must be taken up with fertility map and should be submitted to ICAR-ATARI, Jodhpur within a month.
- In FLD of cluster bean & green gram percent increased was presented as 106.2% and 81.1% respectively which is to be verified.

### **Technical Session-III**

**Chairman : Dr. S. K. Singh, Director, ATARI, Jodhpur**  
**Co chairman : Dr. S. K. Sharma, DEE, SKRAU, Bikaner**  
**Rapporteur : Dr. M. S. Chandawat, Senior Scientist and Head, KVK, Jodhpur II.**

In this session total 7 KVKs presented their Annual Progress Reports and achievements through PPT presentation. KVK Bikaner-I, KVK Jhunjhunu, KVK Jaisalmer-I and KVK Sri Ganganagar of SKRAU, Bikaner and KVK Ajmer, KVK Alwar (Navgawa) of SKNAU, Jobner, and KVK Hanumangarh-II of RAJUVAS, Bikaner presented the APRs of their respective KVKs.

#### **KVK Bikaner-I**

- Remove the word “refinement” from OFT and use assessment.
- Details of FLD inputs should be prescribed in slides and result of FLD should be presented as per instruction by ATARI.
- Presentation was not up to mark so that it was decided to repeat the presentation. Senior Scientist and Head, KVK, Bikaner will make presentation of progress report as per the direction of ATARI and will have to make presentation on 27<sup>th</sup> June 2018 before Director ATARI at Jodhpur after proper preparation.

#### **KVK Jhunjhunu**

- New variety of Gram should be incorporated under cluster FLDs of NFSM
- Non-monetary inputs should also promote in cluster FLDs under NFSM-Oilseeds in mustard.
- New variety of Oat should be demonstrated under FLD on Fodder crop.
- SMS (Agronomy and Agril. Engineering) should design On-Farm Trials on important implements for particular situations.



## **KVK Jaisalmer-I**

- OFT on Bahar management in pomegranate crop should be corrected & also include economic parameter compulsorily.
- Find out reasons behind very low production in case of lowest production in demonstration plot in CFLD on pulses (Moong bean) and cluster bean crop FLDs as there was very huge gap between highest production and lowest production in FLD plot and even it was observed production below control plot.

## **KVK, Sri Ganganagar**

- Use appropriate terminology while presenting feedback of FLDs given by farmers and under technical feedback
- Time of cotton sowing shown in slide was in the month of April month which should be discouraged and KVK should encourage farmers to follow sowing cotton in the month of June.
- Rural youth training should be of at least 21 days or one month instead of one day. So in future one day training of rural youth will not be allowed. Sponsored training for rural youth may be organized as per the need of sponsoring agency.
- Remove and replace old varieties in FLDs with latest one which is not older than 10 years.

## **KVK Ajmer**

- More specific details of OFTs on effect of feeding of Azola. It should be presented as per the requirement and instruction of Director ATARI and provide information like duration for which the azola was provided and quantity of critical input may be given accordingly under the OFTs.
- Identify the focus group of vegetable growers for obtaining good result and provide training and other technical inputs for getting optimum result.
- Correct the title of OFT on Black gram and barley crop's OFT and mention as varietal assessment.

- In thematic area, use word ICM instead of multi word like INM, IDM, and IWM for same Cluster FLD.
- Check the mentioned dose of fertilizer in FLD on wheat crop and correct doses must be mentioned.
- SMS horticulture should focus on scope of Rose crop cultivation.
- Specify the saplings of fruit crops and also mention the details of production separately in case of fruits like ber, Aonla, etc. produced at KVK farm.
- Storage of seed production should be on priority as monsoon is likely to come and accordingly do the needful action.

### **KVK Alwar-I**

- There should be quantification of managing of termite in the fields.
- Display board should be of proper size and should be installed in fields and photographs of FLDs with board should be taken in proper way.
- In case of OFTs of fodder production (Berseem), provide the details of increase in productivity of animal.
- IPM-02-3 variety should be given in demonstration instead of Samrat variety in green gram.
- Identify the primary cause of OFT on Tomato crop for balanced use of fertilizer in tomato.

### **KVK, Hanumangarh-II**

- % reduction of nematode in tomato due to application of critical inputs should be described in presentation instead of only production data.
- In case of moth bean, barley, remove and replace the old varieties in FLDs with new one variety.
- Average yield should be mentioned in FLDs
- In OFT, information given under category, should be corrected

- Correct the thematic area in case of FLD on Azola.
- Correct the title of OFT and use the word “effect” instead of “impact”.
- In animal science discipline, OFT on mineral mixture should be converted into FLD.

### **Technical Session-IV**

**Chairman : Dr. S. K. Singh, Director ATARI, Jodhpur,**

**Co chairman : Dr. G. C. Tiwari, DEE, MPUA&T, Udaipur,**

**Rapporteurs : Dr. D. B. Singh, KVK-Tonk and Dr. Pradeep Pagaria, KVK-Barmer II.**

In this session total 9 KVK presented progress report. Some suggestions given by Chairman, Co chairman and house have been presented as:

#### **KVK-Barmer- I**

- Presentation was not up to the mark so Chairman instructed to present progress report again at ATARI, Jodhpur on last week of June with incorporation of all suggestion.

#### **KVK, Udaipur**

- Under training programme, non-adoption reason should be presented
- In presentation all the critical inputs should be presented.
- Field day programme should be organized at proper stage
- OFTs title should be revised

#### **KVK, CHURU-I**

- Dr. V.K Saini presented progress report of KVK-Churu I but chairman instructed to present progress report again at ATARI, Jodhpur with incorporation of all suggestion.

#### **KVK-Jaipur I**

- Impact of long duration training on Horticulture must be presented.
- In Ground nut FLDs, follow-up study should be done.
- In OFTs, performance indicators should be presented.
- Performance indicators must be presented.

### **KVK, Tonk**

- Under OFTs, number of replication should be at least 10.
- Under FLD economics data should be presented.
- Performance indicators must be presented.

### **KVK, Hanumangarh-I**

- Under OFTs economics data should be presented.
- OFTs should be crop specific.
- Special achievement as per mandate should be presented.
- Performance indicators must be presented.

### **KVK, Rewari**

- Under OFT and FLD, economics data should be presented.
- Under OFTs, fertilizer dose should be checked.
- Under OFTs, number of replication should be at least 10.
- Farmers' reaction and technical feedback should be presented.

### **KVK, Ambala**

- Under OFTs, performance indicator should be presented.
- OFT on value added products of pulses and cereals should be rechecked.
- Under FLDs, number of demonstration should be mentioned.
- Livestock interventions must be undertaken.

### **KVK, Delhi**

- Dr. P. K. Gupta presented the progress report.
- There was lack of systematic presentation.
- Cluster Front Line Demonstrations must be organized based on gap analysis.
- OFTs need to be formed based on Agro-ecosystem analysis through PRA.
- All performance indicators must be reflected in each On-Farm Trials.
- Success stories need to be written & submitted to ICAR-ATARI, Jodhpur.

## **Technical Session-V:**

**Chairman : Dr. G.S. Bangarwa, DEE, SKNAU, Jobner**

**Co-chair : Dr. R.S. Hudda, DEE, CCSHAU Hisar**

**Rapporteurs : Dr. Rajbir Garg, KVK, Panipat Dr. Rajesh Kumar, KVK, Rohtak**

In this session, Annual Progress Reports were presented by 14 KVKs of CCS HAU, Hisar and 6 KVKs of AU Jodhpur with following details:

<b>S.No.</b>	<b>Name of KVK</b>	<b>Name of presenter</b>
1	Panipat	Dr. Rajbir Garg
2	Hisar	Dr. Narender Singh
3	Bhiwani	Dr. Vinod Kumar
4	Faridabad	Dr. Rajender Kumar
5	Yamunanagar	Dr. B.R. Kamboj
6	Fatehabad	Dr. Sardul Mann
7	Jhajjar	Dr. (Mrs.) Shashi Vashisth
8	Kaithal	Er. Ajit Sangwan
9	Kurukshetra	Dr. J.N. Bhatia
10	Jind	Dr. R.D. Panwar
11	Mahendergarh	Dr. Ramesh Yadav
12	Rohtak	Dr. Rajesh Kumar
13	Sonapat	Dr. Anil Rathee
14	Sirsa	Dr. D.S. Jakhar
15	Barmer-II	Dr. Pardeep Pagaria
16	Jalore	Dr. Pankaj Lavania
17	Sirohi	Dr. Virender Singh
18	Nagaur-II	Dr. Gopi Chand
19	Nagaur-I	Dr. Arjun Singh Jat
20	Jodhpur-II	Dr. M.S. Chandawat

The following points emerged during the course of discussion:

1. CFLD plots should be depicted by a good sign board containing necessary details about CFLD. The photographs of field day and other activities related to CFLD should be of good quality.
2. Each KVK should prepare a document on one prominent technology of its domain having large scale adoption. The name of the technology should be provided to the ATARI.
3. The summer moong crop in rice-wheat cropping system being sown after 15<sup>th</sup> April is not economical. The grain yield is meager and it is largely used for the purpose of green manuring. Hence, CFLDs on spring moong should be conducted in the alternative cropping system where sowing is possible preferably in the month of March or latest by 15<sup>th</sup> April. The KVKs should get revised their CFLD allocation accordingly.
4. For reporting purpose, the uniform unit for area is hectare (ha). Hence, the yield and economic data should be reported on ha basis.
5. The economic analysis of FLDs and OFTs is done on the basis of variable cost and hence, the rental value should not be included in the computation of cost.
6. It was reported by KVK Hisar that area under castor is increasing in district Hisar. In such cases of horizontal expansion, the crop being substituted by the new crop should also be indicated and comparative economics of both the crops should also be presented.
7. A poster displaying the situation, use pattern and developmental strategy for KVK farm should be displayed in the KVK. Soil and water quality information should also be included in this poster.
8. The FLDs are to be conducted with complete production technology and not on component technology. However, the inputs for FLDs should be provided on the basis of technological gap analysis.
9. Each KVK is to promote one FPO. Mere technical support /involvement in the FPO promoted by some other agency are not sufficient.
10. KVK Faridabad is without Jeep for last many years. Mobility is must to perform the mandated activities. In case, the funds from ICAR are not possible, the jeep may be purchased from the revolving fund which at present is about 30 lacs. There is no bar from ICAR side regarding the purchase of vehicle from revolving fund.
11. Seed Production on cereals, pulses, oilseeds, vegetables and fodder crops must be undertaken at KVK's Farms by KVKs of Haryana & Delhi.

12. There should be exchange visits of scientists and progressive farmers among the KVKs. If any KVK has strong area of work replicable in the domains of other KVKs, such KVK with the permission of Director ATATI may take initiative for such exchange visits.
13. Having regard to the scarce and costly labour, paddy transplanter is going to be a very important machine in rice-wheat cropping system. There is yield gain and also water saving. This machine being costly should also be provided with same kind of subsidy support as has been provided to residue management machines.
14. Protected cultivation should be promoted to increase the income of farmers. The chairman informed the house about the adoption of protected cultivation in village Baseri of district Jaipur, Rajasthan. The farmers of this village have resolved the nematode problem with the solarization technology in summer months. This technology was provided by Nematologists at Durgapura. The KVKs of Haryana facing problem of nematodes in poly houses may seek the help of Nematologists at Durgapura.
15. Each KVK should have water harvesting pond/reservoir for life saving irrigation and ground water recharge. This reservoir may also be used for fishery.
16. Each KVK should have solar power system and if possible ICAR should provide funds for the same under regular contingency or under some specific project.
17. For each FLD/OFT; plot size, no. of participating farmers and total area covered should be indicated.
18. Though separate workshops are held for CFLD on pulses and oilseeds, but even then information/data on CFLDs should be included and presented in the Annual Progress Report as well. Impact should be highlighted.
19. In case of seed treatment, the chemical used and its dose should be specified.
20. In case any KVK receives financial assistance /project from other agency, the information to this effect should be given to ATARI office and work plan under such project should also be shared with ATARI office. The mandated activities should get priority in such cases.
21. The presentation should be critically checked by Sr. scientist cum Head and should have substantial discussion with the concerned scientists to have clarity on the issues/information being presented.
22. The plantation of fruit plants should be preferred over other tree species like Eucalyptus etc. on the KVK farm and in KVK premises.

## **Presentation of KVK, Churu-I, Barmer-I & Bikaner-I at ICAR-ATARI, Jodhpur held on 27.06.2018**

Presentations of KVKs Churu-I, Barmer-I and Bikaner-I were not up to the mark at Annual Zonal Review Meeting held during 10-12 June, 2018 held at SKRAU, Bikaner and accordingly the KVKs were asked to represent the Annual Progress at ICAR-ATARI, Jodhpur on 27.06.2018. The recommendations in respect of above mentioned KVKs are as under:

### **KVK, Churu-I**

- Cluster-village approach should be followed for OFTs & FLDs.
- As per presentation ATIC should be full-fledged.
- Source of information should be mentioned in weather data.
- Sponsored training programme should be minimized.
- Feedback of trainings should be obtained from farmers.
- Training number should be reduced & quality of training should be enhanced and impact point should be noted and should be analyzed.
- Fertilizer application should be different for irrigated and rainfed situations.
- Seed rate for broadcast/line sowing should be verified.
- Banner should be properly installed.
- Dominating weed in Rabi should be identified and accordingly doses of weedicide should be mentioned.
- In chickpea pheromone trap must be used for insect control.
- GNG-1581 in chickpea should be replaced with new variety.
- Range should be mentioned for cost of sale of produce.
- Problem cause diagram should include biophysical and socio-economic factors.
- Minimum 5 OFTs with 8-10 farmers should be taken up and Home Scientist should be involved in all OFTs.
- IFS model need to be established within six months at KVK Farm on priority basis.

### **Barmer-I**

- Training titles in power point presentation should be mentioned properly.
- SMS (Home science) should be involved in all training programmes.
- Number of training programmes should be enhanced with duration of four days.



- Pest infestation should be elaborated in FLDs in terms of intensity (%) reductions.
- Aphid management in mustard should be done as per requirements.
- Display boards in FLDs mustard should be proper.
- Chickpea variety should be replaced with new one.
- Source of technology in OFT cumin should be mentioned.
- OFTs in livestock should be taken up in priority.
- IFS models are to be established based on Farmers interest, affordability & usability on long term basis.

### **Bikaner-I**

- Gross return in FLD should be mentioned in range.
- Banners of different activities need to be displayed.
- OFTs on mustard – orobanche and use of Pendimethalin should be verified.
- Titles of trainings should be properly mentioned.
- Revolving fund should be increased.
- TCS information should be submitted in excel on priority.

## **RECOMMENDATIONS FOR ALL KVKs**

From presentations and discussions, the below-mentioned points were emerged out to address the issues by KVKs for wider visibility in the district. The road map for strengthening the KVK's functioning has been narrated here in. All Directors of Extension Education and Senior Scientist & Heads must follow the below mentioned recommendations:

1. Integrated Farming System models should be established at all KVKs so that the farmers will be encouraged to establish the same at their fields.
2. Need identification methods should be used by KVKs for initiating various intervention through Participatory Rural Appraisal (PRA), survey method, reactions of the farmers about activities and impact assessment need to be mentioned.
3. E-correspondence should be encouraged at KVKs level to reduce the time.
4. Success stories/case studies should be documented & replicated wherever possible.
5. Live demo units (Integrated farming system, water harvesting system, micro irrigation system with solar power, crop and fish cultivation, vermin-compost, etc.) should be established at each KVK farm for educating the farmers/youth/farm women.
6. Emphasis must be given on off campus trainings by involving of all SMSs for learning in real situation and for wider coverage.
7. Every successful demonstration should be followed by a field day with good quality sign board (mentioning name of farmer or no. of farmers/variety/sowing date/name of cluster/village etc.)
8. Feedback of the farmers should be recorded after completion of each activity. The data must be verified with crop cutting for all CFLDs.
9. Value added activity should be initiated by KVKs.
10. Every KVK should develop a model of shed net house/protected cultivation.
11. KVK guide may be published from ICAR headquarter so that it may be helpful in enhancing efficiency of KVKs.
12. Most vulnerable groups of society need to be addressed on priority like women (tailoring and embroidery, SHGs, drudgery reduction, etc.), small & marginal farmers (mushroom, vermin-compost etc.), tribal (poultry, goatery etc.) and other disadvantaged groups.
13. A cafeteria of important crops needs to be developed at each KVK farm involving latest released varieties with the brief description.

14. Information need to be uploaded at KVK website, portal etc. on daily basis.
15. Performance indicators including technical observations, economics and farmers reflections need to be elaborated in on-farm trials.
16. More interventions are desired where higher yield can be achieved in the enterprises like livestock, goatery, poultry, mushroom etc.
17. Progress/lead farmers are to be identified by KVKs and to be used as resource person for the trainees to promote the farmer to farmer extension in the district.
18. Farmers' friendly literature in the form of leaflets, pamphlets, folders, bulletins must be printed for wider publicity.
19. Economics of demonstrations units should be worked in each season to provide real picture to the farmer, farm women and rural youths.
20. Each KVK will organize 6-8 in-service training on various aspects to provide latest technological know-how to the extension personnel.
21. Fact-sheets under FLDs are to be handed over to farmers to get real information.
22. More emphasis is to be given on livestock, horticultural, mechanization and gender-streaming interventions.
23. Lesson Plans of each training course should be developed and prior approval of Senior Scientist & Heads is required for organization of each training programme.
24. Custom Hiring Centre (s) must be created by KVKs in the villages (s).
25. Formation of Farmer Producer Organization has become foremost requirement. All KVKs are advised to develop at least one FPO in the village (s).
26. Scientific Advisory Committee meeting should be organized on regular basis with the involvement of all Public-Private, NGOs and other stakeholders.
27. Proper utilization of funds under CFLDs Pulses & Oilseeds must be done based on critical inputs provisions.
28. Every KVK is supposed to conduct Agro Eco System Analysis by applying PRA tools and 6-8 OFTs are to be organized in each year on different aspects. At least 10 farmers in each OFT are to be covered.
29. Soil sample analysis should be the regular feature of KVKs.

