# Proceeding of Virtual Zonal Workshop-cum-Training of CFLDs on Pulses under NFSM for KVKs of Rajasthan, Haryana and Delhi

Two days (23<sup>rd</sup> & 24<sup>th</sup> November) "Virtual Zonal Workshop-cum-Training under National Food Security Mission for KVKs of Rajasthan, Haryana and Delhi has been held by ICAR-Agricultural Technology Application Research Institute, Zone-II, Jodhpur.

Dr. A K Singh, Deputy Director General and Chief Guest of the inaugural session mentioned the priority of pulses in Indian context. He narrated that we are importing pulses due to the international obligations and for treaty signed, otherwise the India is self-reliant in pulses production due to strenuous efforts under National Food Security Mission where KVKs role is discernible. Possibilities for enhancing the pulse production through organization of CFLDs on summer mung bean, lentil and lathyrus under different agro-ecological region of Rajasthan & Haryana could be achieved. He also stressed on the role of seeds hubs across country where seeds production is being undertaken in participatory mode. He strained on extension and technical strategies for enhancing pulses productivity in zone. Pulse production must be linked with the processing and value addition for higher income of partner as well as neighbouring farmers. Effect of nipping and other good technological practices in pulses can be documented by ATARI, he opined.

Dr. S.K. Singh, Director, ICAR-ATARI, Zone-II, Jodhpur stated that pulses are natural gift for fixing of atmospheric nitrogen in soil and fulfilling protein & vitamin requirements in diet of vegetarians. In cropping system, pulses are recommended for managing natural resources and reduce the use of chemical fertilizers. Weed management, assured irrigation, availability of quality seed, insect-pest problems are the major concerns of pulses production and should be addressed on priority. Feedback mechanism of CFLDs on pulses should be gratified in a proper way so that researchers, development departments and policy makers can get proper information for future planning leading to harnessing pulses production in pulses. The fact sheets are to be maintained by partner farmers with the help of KVKs so that the same can be analysed after conductance of CFLDs. Identification of technological gap in implementation of technology options is to be taken up and should be critically examined so that gap can be minimized.

Dr. A.K. Tiwari, Director, Directorate of Pulse Development, Bhopal briefed on pulses prospects and developmental initiatives of Government of India across the states. He emphasized on possibilities of vertical expansion by demonstrating preferred varieties and other technological packages in different farming situations.

Dr. H.R. Mehla, Principal Scientist, ICAR-CAZRI, Jodhpur narrated his deliberation on status and strategies of mung bean, moth bean & cluster bean for improvement in arid zone.

Dr. S.K. Sharma, Director of Extension Education, SKRAU, Bikaner; Dr. Ishwar Singh and other Directors from State Agricultural Universities also emphasised on need assessment and other practical issues in implementation of CFLDs.

All the 63 KVKs of Rajasthan, Haryana and Delhi participated in the programme. KVKs will present their progress report for year 2019-20 and action plan for the year 2020-21.

# RECOMMENDATIONS FOR ALL THE KVKS:

From the presentations of KVKs, the following points were emerged out for recommendations in order to improve quality of work and presentations.

- Gap analysis must be done before conductance of CFLDs for rationalization of critical inputs as well as critical practices.
- Crop cafeteria should be developed at each KVK.
- Measurement of each CFLD must be done.
- Field selection of CFLDs and inputs must be taken up in advance.
- Ensure the regular filling up of the fact sheet by farmers.
- More emphasis should be given in villages selected under DFI.
- KVKs display board should be fixed at CLFD fields and should be near roadside so that activities of KVKs can be reflected to other farmers/visitors.
- Follow up activities needs to be taken up in a phased manner.
- Farmers' feedback to be taken for strengthening of forward and backward linkages.
- Horizontal spread of technology to be stressed upon for impact of programme.
- Select one farmer field for crop cutting and collect the related data and same data need to be communicate to the ATARI with photographs and video clippings.

- Cropping pattern to be recorded and accordingly technology packages to be decided.
- Farmers should be motivated to keep a portion (at least 25%) of produce as seed for next season.
- Proper source of data is required to be mentioned in presentations.
- Participation of multidisciplinary team is required for implementation of CFLDs (SMSs Agronomy, Plant Protection, Agril. Extension & Home Science).
- Field visits by Incharge of KVK is also mandatory for monitoring as well as work as scientist in his respective field.
- All the disciplines in KVK are equally important, hence Incharge may ensure to make visits of each SMSs as and when required by him.
- Feedback for researcher, development department & policy maker must be reported.
- For any updates, kindly frequently visit to website of ATARI (<a href="www.atarijodhpur.res.in">www.atarijodhpur.res.in</a>) or contact to the ATARI office. For any gap, nodal officer will be responsible.
- Banned insecticides/pesticides should not be used in CFLDs.

# KVK WISE SUGGESTIONS/RECOMMENDATIONS

Day -I (23rd November, 2020)

#### **Technical Session-I**

Chairman

Rapporteur

Dr. S K Singh, Director, ATARI, Jodhpur

Co-Chairman:

Dr. S K Sharma, DEE, SKRAU, Bikaner Dr. Sudesh Kumar, DEE, SKNAU, Johner Dr. Ishwar Singh, DEE, AU, Jodhpur

Dr. Sushil Kumar Sharma, KVK, Alwar-II

Dr. Dheeraj Singh, KVK, Pali

# A. KVKs of Haryana state

#### ICAR KVKs

#### 1. KVK, Karnal

- Farming situations should be presented in details.
- Seed rate of chickpea should be analyzed.
- Source of statistical data should be mentioned in presentation.
- Presentation should be scientific.
- Variety should be introduced for Chickpea for late showing.

• Planning for summer green gram should be done in advance.

# 2. KVK, Gurugram

- Presentation should be rechecked before presentation.
- Number of pods per plant should be counted in each crop.
- Proper threshing of pigeonpea should be intervene.
- New variety should be introduced in pigeon pea as productivity is very low.

#### KVKs under CCSHAU, Hisar

#### 3. KVK, Sirsa

• CFLDs should be taken in nearby village farming and covering an entire cluster.

# 4. KVK, Sonipat

• Timely implementation of summer mung should be taken next year.

# 5. KVK, Yamunanagar

- Gaps should be identified before implementation of CFLDs.
- Zinc deficiency in soil should be checked and accordingly, planning should be done.

#### 6. KVK, Kaithal

- Need for more scientific presentation.
- Change insecticide Rogor with new molecule.
- Gap analysis should be done before implementation of CFLDs.
- Farming situation wise separate result should be presented in presentation.

#### 7. KVK, Faridabad

- Cluster wise separate result should be presented in presentation.
- Other parameters of crop should be presented.
- Potassium should be applied in demonstrations.

#### 8. KVK, Hisar

- Seed rate of chickpea should be rechecked; 16kg/acer is very low seed rate.
- Sowing of chickpea should be done before first week of November.

# 9. KVK, Jhajjar

Presentation is good but need to check seed rate.

# 10. KVK, Jind

Need to improve the execution of CFLD yield parameters.

## 11. KVK, Kurukshetra

- Year of release of MH-421 variety must be rechecked.
- Need to check the yield.

# 12. KVK, Panipat

- Crop cafeteria of chickpea should be developed at KVK farm.
- Potato crop should be introduced after green gram.
- Need timely sowing and advance preparation.

# 13. KVK, Bhiwani

- Name and nature of insect pest should be mentioned.
- Sulphur must be included in fertilizer dose.

## 14. KVK, Rohtak

• Yield of green gram is low, needs improvement.

# 15. KVK, Mahendergarh

- New variety should be taken in CFLDs.
- Green gram tables and presentation is required for different farming situations.

## 16. KVK, Fatehabad

- Separate banner should be used for each field activity i.e., training, CFLDs etc.
- Use good quality photographs for presentation.

# 17. KVK, Ambala

- Package of practice should be specific.
- NPK should be applied as per recommendation of POP.
- Seed rate of gram should be as per POP/farming situations.

# 18. KVK, Rewari

- Phosphorous application should be re-checked.
- Presentation should be systematic.

# Day-II (24th November, 2020)

#### Technical Session-II

Chairman	: Dr. S. K. Singh, Director, ATARI, Jodhpur
Co-Chairman	: Dr. S. K. Sharma, DEE, SKRAU, Bikaner
	Dr. Sudesh Kumar, DEE, SKNAU, Jobner
	Dr. Ishwar Singh, DEE, AU, Jodhpur
Rapporteur	: Dr. Ramesh Kumar, KVK, Mahendergarh
11	Dr. V K Saini, KVK, Churu-I

# B. KVKs of Rajasthan state

## ICAR, KVKs

#### 19. KVK, Alwar-II

- Seed rate of kharif green gram should be rechecked. 20 kg/ha is very high seed rate.
- Budget utilization under green gram should be rechecked.
- Results should be presented along with weed managed in percent.
- Provide feedback of seed rate in ZREAC meeting.

## 20. KVK, Jodhpur-I

- Try to procure seed of RMO-225-1 for next time CFLD programme
- More emphasis should be given in DFI village.
- Seed rate of chickpea variety GNG 1958 should be 80 kg/ha instead of 60 kg/ha.

## 21. KVK, Pali

- Identify the reasons for low productivity of moong.
- Presentation should be based on gap assessment.
- Rationalization of critical inputs should be done.
- Increase CFLD area of moth bean if fund in surplus.
- Focus on black soils area for chickpea demonstration.

#### KVKs under SKRAU, Bikaner

## 22. KVK, Bikaner-I

- Do not use word 'High yielding variety' instead use 'Improved variety'.
- Seed rate and spacing is very important in moth bean and must be taken care.

## 23. KVK, Churu-II

- Seed of moth bean variety RMO-225-1 should be produced with participatory mode.
- Take seed of certified of moth not TFL (seed production should be in scientific mode).
- Compare the pest management in farmers practice and demonstration.
- Scopes of chickpea cultivation are there in areas of the district adjoining Haryana state. Efforts should therefore be made to identify the area for chickpea cultivation particularly in Rajgarh subdivision.
- Technical observations should be taken to show the effect of different technologies.
- The chairman suggested to quantify % control of insects in terms of increase in number of pods/plant.
- Chickpea varieties for demonstrations should be taken according to soil type.

# 24. KVK, Bikaner-II

- Moth variety RMO-225-1 should be taken for CFLD programme.
- Management of weeds and YMV in moong demonstrations should be in proper manner.
- The chairman pointed out that factors contributing to maximum yield in demonstration require to be mentioned in presentation.

## 25. KVK, Jaisalmer-I

- Yield observation should be taken properly and factors for increase or decrease in yield should be recorded.
- More emphasis should be given in DFI villages.
- The chairman pointed out that factors contributing to maximum yield in demonstration require to be mentioned in presentation.

#### 26. KVK, Jaisalmer-II

- New chemicals for plant protection should be taken instead of old one.
- Monocrotophos is banned by Govt. of India so provide this feedback in ZREAC meet to revise the PoP.

- Chairman pointed out that emphasis on application of phosphorus should be given to harvest good yield of pulses.
- The chairman suggested to provide timely feedback to researchers.

# 27. KVK, Jhunjhunu

- Dose of weedicide should be rechecked.
- More focus should be given in DFI village
- The chairman suggested to record observations and present results on basis of faming situation.

#### 28. KVK, Sriganganagar

- Identify the reason for low productivity of moong although area in increasing in the district and provide feed- back in proper way as per situation.
- Improve slide fonts, it should be visible in a proper manner.
- KVK should start seed production in participatory mode with farmers.
- Farmers participatory approach should be followed in CFLDs.

## KVKs under SKNAU, Jobner

## 29. KVK, Alwar-I

- Include DFI village for CFLD programme.
- 50% of contingency funds should be used for DFI villages.
- Try to demonstrate other suitable variety of moong than IPM 02-14.

#### 30. KVK, Bharatpur

- Area should be mentioned in ha instead of acre.
- Photos should be in a proper manner.

#### 31. KVK, Dausa

- More focus should be given in DFI village
- Photos of all stages of crop in demonstration should be taken in a proper manner.

## 32. KVK, Ajmer

• Number of chickpea demonstrations should be as per guidelines of CFLDs.

# 33. KVK, Dholpur

- Seed of pigeon pea should be procured in advance.
- New variety of pigeon pea should be taken in CFLDs instead of old varieties.
- Progress of Rabi 2020-21 CFLDs of pulses should be presented in workshop.

## 34. KVK, Jaipur-II

- Maximum farmers should be covered in CFLDs as per allotment.
- Table titles should be corrected as per ICM mode of CFLDs.

## 35. KVK, Sikar

- More focus should be given on DFI villages through CFLDs.
- Seed rate of moong (20 kg ha) in rainy season should be rechecked and should be in a range.
- Crop cutting observation were missing in presentations and identify the factors responsible for maximum and minimum yield in CFLD.
- Use contact insecticide for pod borer in chickpea than systemize one.

# KVKs under AU, Kota

#### 36. KVK Baran

- The seed rate of black gram@10-12 Kg/ha is sufficient based on soil type in the district.
- Mortality of Chickpea plants is due to root rot, not due to wilt as reported.
- The chairman pointed out that seed rate of black gram used in demonstrations was 18 kg/ ha which is high and needs to be looked into.

#### 37. KVK Bundi

Due to network problem, presentation could not be completed.

#### 38. KVK Jhalawar

- Bed planter should be used for sowing of black gram so that crop may not get damaged due to rainfall. The technique may be demonstrated at farmers' fields for harnessing the benefits.
- The dose of Imazethapyr should be corrected.
- The soil type of demonstrated fields should be specified.

- Co-Chairman, DEE, MPUAT suggested to mention dose of herbicides in active ingredient (a.i.) form instead of commercial dose.
- The chairman suggested to conduct 50 % of CFLDs in villages selected for doubling farmers income programme.
- The chairman also suggested to conduct the CFLDs in clusters having similar farming situation.
- It was suggested by the chairman to mention the soil types scientifically.

#### 39. KVK Karauli

- Package of Practices only on the basis of soil type and agro-ecological conditions of the district should be followed.
- The productivity of black gram should be confirmed.
- Wilt resistant varieties of chickpea should be taken in demonstrations.

#### 40. KVK Kota

- KVK should have raised bed planter for sowing of black gram and demonstrate for its popularization amongst farmers.
- Sowing of crop should be done at proper spacing.
- Do not use the word 'Sale Price' instead of MSP.
- The chairman suggested to do sowing of black gram crop in CFLDs at row-row spacing of 45 cm and by raised bed planting method in hid rainfall areas.

#### 41. KVK Sawai Madhopur

- Follow one application of pre-emergence weedicide followed by hand hoeing, as two applications as pre-emergence and post emergence increase weedicide load may be harmful to succeeding crop also.
- The efficacy of Imazethapyr is low under low soil moisture conditions in summer and therefore must be avoided.
- Follow a common pattern for indicating the strength/dose of pesticides viz a.i or dosage.
- Information not provided on Chickpea (2020-21).
- It was pointed out by the chairman that pendimethalin cannot be applied at post emergence stage of crop as mentioned in the report.

# KVKs under AU, Jodhpur

# 42. KVK, Barmer-II

- Source of statistical data should be mentioned.
- Need to make scientifically correct presentation.

# 43. KVK, Jalore

- Farming situation should be described very specifically.
- Very casual presentation, need to improve.

# 44. KVK, Jodhpur-II

- Demonstration should be taken in ICM mode.
- Technological gap should be done properly.

# 45. KVK, Nagaur-I

- Observation of disease/pest infestation should be taken.
- For insect & pest management, proper quantity of insecticide should be mentioned.

# 46. KVK, Nagaur-II

• In gap-based intervention, farming situation should be elaborated.

# 47. KVK, Sirohi

- At least 50% demonstrations have to be taken in DFI villages.
- Typological errors in the presentation need to be taken care.

## KVKs under MPUA&T, Udaipur

## 48. KVK, Banswara

- Source of secondary data should be mentioned.
- Need to improve the presentation.

# 49. KVK, Bhilwara-I

 Results may be presented according to farmers who have applied recommended dose of fertilizers.

#### 50. KVK, Bhilwara-II

- Unit 'gm' instead of 'ml' for Pendimethilin should be used.
- Dose of Phosphorus should be confirmed and PoP should be followed.
- 'NPK' as Potash should be removed.

## 51. KVK, Chittorgarh

• Feedback of farmers should be given to the researchers.

# 52. KVK, Dungarpur

- Name of weedicides should be mentioned correctly.
- Green gram varietal characters should be cleared.
- Presentation was not upto mark, need to improve.

# 53. KVK, Pratapgarh

- Pest incidence and weed flora before the presenting the pest and weed management should be described.
- Cost of cultivation should be rechecked.

# 54. KVK, Rajsamand

- Explain CFLD in Chronological order.
- Farming situation and environment in which Chickpea has been demonstrated under different sowing times should be explained.

## 55. KVK, Udaipur-II

- Presentation needs to be improved.
- Farming situation should be mentioned.
- Utilization of funds is very less.
- Sign board should be installed at site of CFLDs.

#### KVK under RAJUVAS, Bikaner

#### 56. Hanumangarh-II

- Technological gap analysis needs to be done properly.
- Presentation needs to be improved.

#### KVKs under NGOs

#### 57. Barmer-I

• Due to network problem, presentation could not be completed.

#### 58. Churu-I

- Presentation needs to be improved.
- Pesticides under CFLDs should be provided according to incidence of pests not on general basis.

# 59. Hanumangarh-1

• Information not provided on Chickpea (2020-21).

# 60. Jaipur-1

- Results of gram CFLDs 2019-20 was not presented.
- Presentation needs to be improved.

#### 61. Tonk

- Good quality photographs need to be used.
- Frequent visits to CFLD fields are mandatory.

## 62. Udaipur-1

- Presentation not scientifically and it needs to be improved.
- In black gram CFLDs, results are not acceptable.
- Soil type in the CFLDs should be mentioned correctly.
- Results of CFLDs were not synchronization with rainfall.

## C. KVK under Delhi State

## 63. KVK, Delhi

- In chickpea, new variety should be taken.
- Presentation not scientifically and it needs to be improved.
- Secondary data needs to be rechecked.

After presentations and concluding remarks of the Director, ICAR-ATARI, Zone-II, Jodhpur,

Dr. M. S. Meena proposed the vote of thanks to Chair and all the participants.

(M. S. Meena)
Organizing secretary

Submitted for kind approval please.

Director

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