

**Proceeding of Annual  
Action Plan Workshop of  
KVKs in Maharashtra  
22 February, 2023  
ICAR-NRC Grapes, Pune**



**भाकृअनुप-कृषि प्रौद्योगिकी अनुप्रयोग अनुसंधान संस्थान (अटारी)  
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# Proceedings of Action Plan Workshop of KVKs in Maharashtra

(Co-Organized by ICAR-ATARI, Zone-VIII, Pune and ICAR-NRC Grapes)

Venue: NRCG Pune

Date: 22 to 23 February, 2023

Action Plan Workshop of KVKs in Maharashtra was co-organized by ICAR-ATARI, Zone VIII, Pune and ICAR National Research Center on Grapes, Pune at NRC Grapes, Pune from 22 to 23 February, 2023. The major objective of this workshop was to critically review and finalize Action Plan for 2023.

## Inaugural Session

Time	Programme	Speakers
09.00 - 09.30 hrs	Registration	
09.30 - 9.35 hrs	Arrival of Hon'ble Chief Guest, Special Guests and Dignitaries ICAR Song and Lighting of Lamp	
09.35 - 09.45 hrs	Welcome and about the workshop	Dr. Kaushik Banerjee, Director, ICAR-ATARI, Pune
09.45 - 09.50 hrs	Remarks by DEE	Dr. T. K. Narute, DEE, MPKV, Rahuri
09.50 - 09.55 hrs	Remarks by DEE	Dr. D. B. Deosarkar, DEE, VNMKV, Parbhani
09.55-10.00 hrs	Release of mobile application Grape Advisory	
10.00 - 10.25 hrs	Remarks by Guest of Honor	Dr. V.M. Mayande, Former Vice Chancellor, PDKV, Akola
10.25-10.30 hrs	Vote of Thanks	Dr Rajesh T, Scientist, ICAR-ATARI, Pune

Dr. Kaushik Banerjee, Director, ICAR-ATARI, Pune welcomed the delegates and KVK Heads to the Inaugural Programme on 22<sup>nd</sup> February 2023 at 09.30 am. He emphasized the importance of commercial crops like grapes, pomegranate, citrus, etc. in Maharashtra state and urged on improving their quality and safety through appropriate technological interventions. He also emphasized on facilitating more agro-based and other advisories by developing various apps in different crops, and sharing those with farmers for implementation of good agricultural practices.

Dr. D. B. Deosarkar, DEE, VNMKV, Parbhani in his address described different aspects of crop diversification and highlighted the importance of millets especially bajra and sorghum in the context of Maharashtra state. He urged KVKs to follow the practice of intercropping of pulses and oilseeds in the state.

Dr. V. M. Mayande, former Vice-Chancellor, PDKV, Akola explained about the significance of increasing farmers' income and the ways of increasing farm income through farm and non-farm activities. He urged the participants to work on priority areas like application of Information Technology, Artificial Intelligence, drones and robotics in agriculture, promotion of group farming and Farmer Producer Organizations. He also stressed on responsibility of the KVKs to understand ground level problems and select appropriate technologies for assessment of farmer's field. He also emphasized that KVK's should also document influence of agricultural technologies on enhancing farmers income and contribution to Indian Economy.



Dr. V. M. Mayande elaborated on role of DEEs in technological backstopping and monitoring of KVKs under their jurisdiction. He enquired about absence of DEE, PDKV, Akola, DEE, BSKKV, Dapoli and DEE, MAFSU, Nagpur and said that the presence of DEEs is necessary in such an important workshop where Annual Action Plan of KVKs are being finalized. He also emphasized the need of University level detailed SMS wise action plan workshop and finalization of subject matter programs with the involvement of the university specialists.



While addressing the gathering, Dr. T. K. Narute, DEE, MPKV, Rahuri appealed to the KVKs to focus on millets.

Seven publications including ARYA booklet, folders on millets, oilseeds and ICM were released during the workshop. One Mobile App on Grape Advisory developed by ICAR-NRC Grapes in collaboration with IMD, Pune was also released during the event.

Vote of Thanks for the Inaugural Programme was given by Dr. Rajesh T, Scientist, ICAR-ATARI, Pune.

Director of Extension Education MPKV, Rahuri, Director of Extension Education VNMKV Parbhani, Scientists from ATARI Pune, NRC Grapes and Senior Scientist and Head from 50 KVKs of Maharashtra participated in the Action Plan Workshop. Subject matter experts Dr. S.K. Das, Principal Scientist, IVRI-TEC, Pune, Dr. S.K. Kamble, Associate Professor, MPKV, Rahuri, Dr. N.A. Deshmukh, Senior Scientist, NRCG, Pune and Mr. M. R. More, Professor, VNMKV, Parbhani representing Animal Husbandry, Agronomy, Agril Engineering and Horticulture participated and helped in fine-tuning the action plan of KVKs.



Overall, 85 participants were present for the Action Plan Workshop of KVKs in Maharashtra at NRCG Pune from 22 to 23 February 2023. Respective Senior Scientist and Head presented the Action Plan of KVKs during technical sessions. The Session-wise presentation and comments/suggestions are given below for the further necessary action by KVKs.

## Technical Sessions

**Day 1: 22 February 2023**

**Chairman:** Dr. V. M. Mayande, Former VC, PDKV, Akola  
**Co-Chairman:** Dr. T. K. Narute, DEE, MPKV, Rahuri &  
 Dr. D. B. Deosarkar, DEE, VNMKV, Parbhani

### Technical Session-I

<b>10.45-13.00 hrs</b>	<b>Presentation of Action Plan 2023 by KVKs (10 minute presentation +2 minute discussion)</b>	
	<b>Rapporteurs</b>	Dr. Sachin Digrase, Head KVK Latur Tushar Athare, Scientist, ICAR-ATARI, Pune
	<b>Presentation by 9 KVKs</b>	Pune-I, Pune-II, Satara-I, Satara-II, Ahmednagar-I, Ahmednagar-II, Kolhapur-I, Solapur-I, Solapur-II
<b>12.45-13.00 hrs</b>	<b>Remarks of Chair and Co-chairs</b>	

In this session, a total of 09 KVKs (MPKV Rahuri-02 and NGO-07) functioning under SAU and NGOs presented the Action Plan. The comments and suggestion are given below.

#### KVK, Pune-I

- KVK should initiate work on Artificial Intelligence based Smart farming Model
- Add grapes and pomegranate OFT

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	10	71	15	86
2	Front Line Demonstration	19	152	29	181
3	CFLD (O & P)	04	100	50	150
4	Training Programmes				
4.1	Farmers / Farm Women	36	500	120	620
4.2	Rural Youth	15	290	105	395
4.3	Extension Functionaries	12	195	55	250
5	Extension Activities (Major)	128	1960	420	2380

#### KVK, Pune-II

- UHDP in Kesar mango required skilled technology and judicious management, KVK was advised to be cautious while conducting these activities.
- Millets program needs to be highlighted
- Plan available natural farming models for assessment
- Add grapes and pomegranate OFT/ FLD
- Focus major crops of the area like Tomato and onion
- Assess use of drone technology for onion

- Suggest OFT- Skirting bags for mango fruits

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	14	144	39	183
2	Front Line Demonstration	14	140	76	216
3	CFLD (O & P)	04	190	85	275
4	Training Programmes				
4.1	Farmers / Farm Women	78	1747	753	2500
4.2	Rural Youth	20	397	198	595
4.3	Extension Functionaries	14	385	117	502
5	Extension Activities (Major)	272	93130	23285	116415

#### KVK, Satara-I

- Take new initiatives like bio-fertilizer/Bio-inputs production units
- Build up techno-economic data set on all components of IFS model

#### Summary of proposed KVK activities

S. No	Activity	No. of Programs	No. of Participants		
			Male	Female	Total
1	On Farm Trials	10	80	20	100
2	Front Line Demonstration	20	240	60	300
3	CFLD (O & P)	02	100	00	100
4	Training Programmes	72	1200	240	1440
4.1	Farmers / Farm Women	36	600	120	720
4.2	Rural Youth	18	300	60	360
4.3	Extension Functionaries	18	300	60	360
5	Extension Activities (Major)	50	2500	1000	3500

#### KVK, Satara-II

- Conduct Urea, DAP trial in rice only not in Nagli
- Area and supply of foxtail millets should be considered before starting extrusion unit.
- Nutritional garden development at KVK instructional farm to be taken on priority.

#### Summary of proposed KVK activities

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	09	60	21	81
2	Front Line Demonstration	11	60	25	85

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
3	Cluster Front Line Demonstrations (O & P)	04	130	20	150
4	Training Programmes	81	1700	415	2115
4.1	Farmers / Farm Women	45	1084	500	1584
4.2	Rural Youth	23	430	185	615
4.3	Extension Functionaries	09	210	110	320
5	Extension Activities (Major)	420	6000	2557	8557

### KVK, Ahmednagar-I

- Elaborate on new OFTs
- Mention the FLDs to be started and to be closed
- Summer Soybean seed production of Phule Durva variety may be taken, however, summer cultivation of soybean may be discouraged.
- Nano Urea needs to be assessed only not promoted.

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	13	79	49	128
2	Front Line Demonstration	13	81	64	145
3	CFLD (O & P)	2	90	10	100
4	Training Programmes				
4.1	Farmers / Farm Women	45	1075	370	1445
4.2	Rural Youth	14	210	120	330
4.3	Extension Functionaries	09	107	98	205
5	Extension Activities (Major)	16	750	1125	1875

### KVK, Ahmednagar-II

- Assess future sustenance of Astrolok breed in KVK area.
- Take a proven breed for intervention in poultry.

#### Summary of proposed KVK activities

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1.	On Farm Trials	21	175	35	210
2.	Frontline Demonstrations	19	161	39	200
3.	Cluster Front Line Demonstrations	05	240	10	250
4.	Training Programmes	97	2808	462	3300
4.1	Farmers / Farm Women	72	2193	359	2542



4.2	Rural Youth	12	262	18	320
4.3	Extension Functionaries	13	353	85	438
5.	Extension Activities (Major)	659	58100	7922	66022

### KVK, Kolhapur-I

- Finger millet cultivation in summer season may be explored
- Assess the profitability beyond 100 tonnes of sugarcane production in Kolhapur area and workout breakeven point and economics

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	12	115	19	134
2	Front Line Demonstration	20	228	67	295
3	Cluster Front Line Demonstrations	03	78	10	88
4	Training Programmes	84	1178	849	2027
4.1	Farmers / Farm Women	48	672	490	1027
4.2	Rural Youth	28	393	287	680
4.3	Extension Functionaries	08	110	75	210
5	Extension Activities (Major)	282	7312	3133	10445

### KVK, Solapur-I

- Promote processed product of sorghum in the district
- OFT on Solar dryer for grain mold in rabi sorghum in Solapur is not relevant.
- Build data set on IFS model components for its economic feasibility.

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programme	No. of Participants		
			Male	Female	Total
1	On Farm Trials	12	149	26	175
2	Front Line Demonstration	16	189	75	264
3	Cluster front line demonstration (O&P)	03	150	00	150
4	Training Programmes	88	1690	565	2255
4.1	Farmers / Farm Women	57	990	400	1390
4.2	Rural Youth	16	400	100	500
4.3	Extension Functionaries	15	300	65	365
5	Extension Activities (Major)	76	18,990	3,790	22,780

### KVK, Solapur-II

- Promote processed product of sorghum in Solapur district
- Conduct OFT on Phule Madhura sorghum at roadside
- Use soil moisture conservation technologies

## Summary of proposed KVK activities

Sr. No.	Activity	No. of Programmes	Total No. of Participants		
			Male	Female	Total
1	On Farm Trials	11	150	15	165
2	Front Line Demonstration	22	300	30	330
3	Cluster Front Line Demonstrations (O & P)	02	140	10	150
4	Training Programmes	106	2523	783	3306
4.1	Farmers / Farm Women	72	1587	504	2091
4.2	Rural Youth	19	435	110	545
4.3	Extension Functionaries	15	501	169	670
5	Extension Activities (Major)	383	22538	2000	24538

### Comments from Chairman Dr. V. M. Mayande, Former VC, PDKV, Akola

- Millets production and consumption to be promoted by KVK's.
- Major and minor millets to be included in crop cafeteria of KVKs.
- Assessments are mainly focusing on crop factor, include other components also
- Crops and varieties are major focus in assessments, include other technological and commodity factors also
- Good Agricultural Practices (GAP) for crops needs to be focused for improving production quality of produce that will fetch better price in market.
- Assess the value chain of different commodities in KVK jurisdiction and work out its impact on farmers income
- IFS models enhance farmers' income and promote best utilization of the natural resources. KVK's should build a database of different components for economic assessment of IFS.
- KVK's should promote location specific value added products of local commodities as per market demand and promote local enterprises and linkages.

### Comments from Co- Chairman: Dr. T. K. Narute, DEE, MPKV, Rahuri

- Maintain cattle germplasm for breeding
- High Density Planting may be revisited as there may be disease problem
- Co-relate climatic data with trials.
- Sangamneri goat along with Osmanabadi breed may be included as its local in Ahmednagar district.

### Comments from Co-Chairman: Dr. D. B. Deosarkar, DEE, VNMKV, Parbhani

- Take demonstrations and interventions on millets
- Fodder crop cafeteria must be maintained
- All KVKs have to work on nutritional garden
- Chickpea varieties of Vijay, Akash, Vishwanath may be used under rainfed situation
- Promote Deshi Cotton varieties in Jalgaon district
- Bio fortified varieties of millets to be taken
- Sorghum-Pigeonpea intercrop is proven technology, may be adopted

- Don't promote summer cultivation of soybean

**Comments from expert: Dr. S.K. Das, Principal Scientist, IVRI, Pune**

- For Animal sciences FLD/ OFT, KVK's can collaborate with IVRI-TEC, Pune.
- KVK's may maintain unit of local indigenous breed in its own breeding stock
- Fodder cafeteria in KVK farm may be initiated
- Conservation of germplasm of livestock is needed
- Multiply the animals for revenue generation
- Feed good fodder to animals for good outputs
- Maintain fodder bank in KVK
- Maintain demo unit of pandharpuri buffalo/ indigenous breeds in respective areas

**Comments from expert Dr. S.K. Kamble, Associate Professor, MPKV, Rahuri**

- Take urea, DAP trial on crop having deep soil
- Phule Durva: take trial only in summer season for good results

**Comments from expert Dr. N. A. Deshmukh, Senior Scientist, NRCG**

- Take new trials on moisture conservation like jalkund, insitu moisture conservation
- KVKs need to take trials on grapes in grape belt
- Focus on climate resilient practices

**Comments from expert Professor M.R. More, VNMKV, Parbhani**

- KVK's located in dryland regions should concentrate on dryland crops like millets and pulses
- KVKs should plan FLDs on in-situ moisture conservation
- Diversification of Soybean mono cropping area to other crops like millets, black gram, green gram etc.

**Technical Session-II**

<b>14.00-16.15 hrs</b>	<b>Technical Session-II Presentation of Action Plan 2023 by KVKs (10 minute presentation +2 minute discussion)</b>	
	<b>Rapporteurs</b>	Dr Prashant Shete, Head, KVK Pune II Dr Rajesh T, Scientist, ICAR-ATARI, Pune
	<b>Presentation by 10 KVKs</b>	Sangli-I, Sangli-II, Nashik-I, Nashik-I, Nundurbar, Osmanabad, Jalgaon-I, Jalgaon-II, Latur, Dhule
<b>16.00-16.15 hrs</b>	<b>Remarks of Chair and Co-chairs</b>	

In this session total 10 KVK presented action plan for the year 2023. Suggestions given by Chairman, Co chairman, experts and other participants in the house are given below.

**KVK, Sangli-I**

- No new program initiated by KVK, revisit old programs
- KVK program has to be critically reviewed by ATARI



### Summary of proposed KVK activities

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	08	80	03	83
2	Front Line Demonstration	09	75	15	90
3	CFLD (O & P)	02	85	15	100
4	Training Programmes				
4.1	Farmers / Farm Women	47	984	240	1224
4.2	Rural Youth	15	333	75	408
4.3	Extension Functionaries	09	189	36	225
5	Extension Activities (Major)	2130	17000	2595	19595

### KVK, Sangli-II

- ATARI should review and guide the KVK in development of suitable program
- Katla/ Rohu fish to be assessed as surface feeder

### Summary of proposed KVK activities

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	06	36	36	72
2	Front Line Demonstration	27	21	21	42
3	CFLD (O & P)	03	50	50	100
4	Training Programmes	57	865	457	1322
4.1	Farmers / Farm Women	40	592	275	867
4.2	Rural Youth	13	198	162	360
4.3	Extension Functionaries	4	75	20	95
5	Extension Activities (Major)	12	145	145	290

### KVK, Nashik-I

- Assess Black Astrolok breed of poultry along with Vanaraja and other proven breeds
- BBF planter for soybean is proven technology, shall be promoted
- Nutrition garden composition should be as per local need.

### Summary of proposed KVK activities

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	10	87	59	146
2	Front Line Demonstration	18	340	335	675
3	CFLD (O & P)	02	50	10	60
4	Training Programme				
4.1	Farmers / Farm Women	125	3002	1454	4456
4.2	Rural Youth	32	543	341	884
4.3	Extension Functionaries	86	1799	700	2499



S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
5	Extension Activities (Major)	151	10806	7453	18259

### KVK, Nashik-II

- Mention the source of technology in dragon fruit intervention
- Osmanabadi goat is under trial for long time, if proven, take up promotion else drop.
- Work on crop residue recycling
- BBF planter for soybean is proven technology, shall be promoted

#### Summary of proposed KVK activities

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	14	122	42	164
2	Front Line Demonstration	20	171	68	239
3	Cluster Front Line Demonstrations	3	125	25	150
4	Training Programmes	82	2209	651	<b>2860</b>
4.1	Farmers / Farm Women	58	1334	361	1695
4.2	Rural Youth	13	340	115	455
4.3	Extension Functionaries	11	535	175	710
5	Extension Activities (Major)	219	4629	863	5492

### KVK, Nandurbar

- Focus on nutrition and income of tribal people
- Revisit sericulture units in tribal region as marketing is major issue
- Promote minor millets processing units

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	12	91	65	156
2	Front Line Demonstration	17	143	116	259
3	Cluster Front Line Demonstrations	6	225	25	250
4	Training Programmes				
4.1	Farmers / Farm Women	73	1393	649	2042
4.2	Rural Youth	20	270	215	485
4.3	Extension Functionaries	07	145	50	195
5	Extension Activities (Major)	450	9525	3550	13075

### KVK, Osmanabad

- Irrelevant OFT's like kharif sorghum grain mold should be dropped
- Review the varieties used for FLD's.
- Take FLD's on sugarcane trash managements

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	18	92	58	150
2	Front Line Demonstration	20	137	258	395
3	CFLD (O & P)	3	50	25	75
4	Outscalling of Natural farming through KVKs. FLD	1	8	8	16
4.1	Training Programmes	87	1410	1020	2430
4.2	Farmers / Farm Women	58	970	740	1710
4.3	Rural Youth	17	190	160	350
5	Extension Functionaries	12	250	120	370
6	Extension Activities	27	1480	3180	4660

#### KVK, Jalgaon-I

- Revisit OFT on increasing bulb size of Onion
- Sigatoka disease in G-9 banana is major issue, OFT may be initiated
- Assess proven model of natural farming if available.

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	7	78	10	88
2	Front Line Demonstration	10	130	40	170
3	CFLD (O & P)	8	300	75	375
4	Training Programmes				
4.1	Farmers / Farm Women	113	1560	960	2520
4.2	Rural Youth	17	265	110	375
4.3	Extension Functionaries	9	60	60	120
5	Extension Activities (Major)	36	25750	10545	36295

#### KVK, Jalgaon-II

- BBF planter is popular technology, organize demonstrations if necessary
- Take up assessment of IPM technology in Cotton
- Create natural farming block for study
- Concept of integrated crop management may be promoted

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	13	151	40	191
2	Front Line Demonstration	13	215	100	315
3	CFLD (O & P)	3	120	30	150
4	Training Programmes				
4.1	Farmers / Farm Women	46	980	400	1380
4.2	Rural Youth	10	200	50	250
4.3	Extension Functionaries	10	200	100	300
5	Extension Activities (Major)	51	2000	950	4520

### KVK, Latur

- Explore feasibility of new crops like Rajma
- Assess the dragon fruit production technology and economics
- Assess the role of subsoiler for moisture conservation under rainfed condition
- Work out economics of drone spraying

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	19	125	65	190
2	Front Line Demonstration	22	180	175	355
3	CFLD (O & P)	06	275	75	350
4	Training Programmes	84	840	687	1527
4.1	Farmers / Farm Women	58	665	517	1182
4.2	Rural Youth	16	230	165	395
4.3	Extension Functionaries	10	125	65	190
5	Extension Activities (Major)	46	1205	1725	2930

### KVK, Dhule

- KVK program may be revised critically to include relevant programs
- The program like gluten free sorghum rawa need not be pursued
- DEE may critically review OFT's and FLDs

#### Summary of proposed KVK activities

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	20	200	76	276
2	Front Line Demonstration	21	190	136	326
3	CFLD (O & P)	02	117	33	150
4	Training Programmes	103			
4.1	Farmers / Farm Women	73	1639	616	2255

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
4.2	Rural Youth	21	461	164	625
4.3	Extension Functionaries	09	227	103	330
5	Extension Activities (Major)	550	9734	4793	14527

**Comments from Chairman Dr. V. M. Mayande, Former VC, PDKV, Akola**

- KVK's should plan a program on quality planting material for orchards
- Assess the secondary agriculture technologies based on local resource feasibility
- Undertake value chain assessment for major commodities in the jurisdiction of KVK's
- Promote local enterprises of value added products from local commodities ex. Soy food enterprise in soybean growing regions

**Comments from expert: Dr. S.K. Das, Principal Scientist, IVRI, Pune**

- Each KVK should make fodder crop cafeteria
- Conservation of germplasm of livestock is needed
- Multiply the animals for revenue generation from cattle
- Maintain fodder bank in KVK's

**Comments from expert Dr. S.K. Kamble, Associate Professor, MPKV, Rahuri**

- Honey bee rearing must be taken
- Jalgaon KVK should review its chick pea program

**Comments from expert Dr M.R. More, Professor, VNMKV, Parbhani**

- While identifying thrust areas, Labour scarcity issue has been sidelined

**Comments from expert Dr. N. A. Deshmukh, Senior Scientist, NRCG**

- HDP trials may be considered
- UHD trials in guava requires very high skills and may be planned accordingly
- KVKs should have mother plantation and plan for modern nursery
- Mention source of technology for dragon fruit

**Technical Session-III**

16.30 - 17.40 hrs	<b>Technical Session – III</b> <b>Presentation of Action Plan 2023 by KVKs (10 minute presentation +2 minute discussion)</b>	
	<b>Rapporteurs</b>	Dr Kishor Zade, Head, KVK Aurangabad-I Tushar Athare, Scientist, ICAR-ATARI, Pune
	<b>Presentation by 5 KVKs</b>	Raigadh, Ratnagiri, Sindhudurg, Palghar, Thane
17.30-17.40 hrs	<b>Remarks of Chair and Co-chairs</b>	

In this session, total 05 KVKs presented their Annual Action Plan through PPT presentation. Chairman and Co-chairman gave the following remarks for the respective KVKs.

### **KVK, Raigad**

- Raigad KVK should focus on special quality rice based value added products
- Promote enterprises on lakadi Ghana oil expelling units as it fetch higher price
- Fish and Rice are major commodities in the districts, assessments and FLD's on these commodities should be priority.
- Program on brackish water aquaculture is missing

### **KVK, Ratnagiri**

- Sericulture/mushroom program may be revisited considering marketing challenges
- Multistoried farming like 'Lakh Bag' concept may be assessed
- Use Urea, DAP briquettes for rice
- Program on Mango and Cashew needs emphasis
- High value crops like spices and coconut should be included
- Program on aquaculture is desirable in collaboration with Fishery college, Shirgaon

### **Summary of proposed KVK activities**

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	09	30	15	45
2	Front Line Demonstration	25	312	157	469
3	CFLD (O & P)	10	120	55	175
4	Training Programmes	77	1540	770	2310
4.1	Farmers / Farm Women	67	1340	670	2010
4.2	Rural Youth	04	80	40	120
4.3	Extension Functionaries	6	120	60	180
5	Extension Activities (Major)	497	4947	3912	9399

### **KVK, Sindhudurg**

- Mango and cashew nut needs adequate focus
- OFT on Spongy tissue needed priority focus as its affecting market
- KVK should also focus on high value spice crops
- Natural farming model from proven source should be assessed

### **Summary of proposed KVK activities**

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	07	37	18	55
2	Front Line Demonstration	06	24	51	75



Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
3	CFLD (O & P)	02	350	50	400
4	Training Programmes				
4.1	Farmers / Farm Women	51	740	350	1090
4.2	Rural Youth	08	95	85	180
4.3	Extension Functionaries	11	190	60	250
4.4	Sponsored	06	118	142	260
5	Extension Activities	33	3229	1536	4765

### KVK, Palghar

- Economic analysis of IFS models should be presented
- Routine OFTs may be reviewed critically ex: Sapota fruit drop
- Direct drilling of rice should be tried alongside nursery and transplanting

### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	14	77	71	148
2	Front Line Demonstration	17	124	146	270
3	CFLD (O & P)	01	30	30	60
4	Training Programmes				
4.1	Farmers / Farm Women	70	895	825	1720
4.2	Rural Youth	32	409	266	675
4.3	Extension Functionaries	16	217	131	348
5	Extension Activities (Major)	66	2520	1786	4306

### KVK, Thane

- This is predominantly urban KVK with two tribal blocks.
- Assessment program on fisheries and livestock in tribal area should be planned aligning to Thane urban market
- Identify two major tribal commodities and focus on their marketing.
- Fish hatcheries- low cost enterprise can be promoted
- Focus on enterprise development in value added products of rice assessing thane market demand
- Assessment of Vegetable production and market be undertaken

### Summary of proposed KVK activities

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	4	27	4	31
2	Front Line Demonstration	5	36	10	46

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
3	Cluster Front Line Demonstrations	2	40	10	50
4	Training Programmes				
4.1	Farmers / Farm Women	61	1700	782	2482
4.2	Rural Youth	20	490	280	770
4.3	Extension Functionaries	2	20	20	40
5	Extension Activities (Major)	117	2858	1224	4082

**Comments from Chairman: Dr. V.M. Mayande, Former VC, PDKV, Akola**

- KVKs should focus on income generating crops like cashew, mango, jamun, vegetables
- Cashew apple value chain should be assessed for enterprise developments
- KVKs in Konkan areas have to plan interventions focusing major crop based enterprises in the region.
- Focus on fisheries, entrepreneurship, interventions on mango and cashew, spices and condiments crops as it is missing from KVK interventions
- Konkan has two different agro-climatic zones (North and South Konkan) with high rainfall and hilly region, however, KVK programs are not focused on region specific interventions
- Major focus should be on income generating crops and activities
- Identify local rice processing enterprise and develop entrepreneurs
- Water conservation component especially jalkumbh technologies needs to be taken up by KVKs
- Biofortified crops are the future of agriculture and KVK should focus on them.

**Comments from Co-Chairman: Dr. D. B. Deosarkar, DEE, VNMKV, Parbhani**

- High yielding varieties from SAU must be taken up by KVKs
- Explore potential of increasing area of oilseed and millets
- Great potential for spices- KVKs should take programmes on it.
- Adopt some of fisheries villages and take assessment of fisherman problems
- Separate focus meeting for program on fisheries by ATARI to be taken

**Day-2: 23 February 2023:**

9.30-11.15 hrs	<b>Technical Session – IV</b> <b>Presentation of Action Plan 2023 by KVKs (10 minute presentation +2 minute discussion)</b>	
	<b>Rapporteurs</b>	Dr Madhuri Revanwar, Head, KVK Nanded-II Dr Rajesh T, Scientist, ICAR-ATARI, Pune
	<b>Presentation by 8 KVKs</b>	Amaravati-I, Amaravati-II, Buldhana-I, Buldhana-II, Yavatmal-II, Akola , Washim

Total 07 KVKs presented in the session were remarked by Chairman and co-chairman during the technical session IV and some of the major highlights made by them during the presentation of KVK are as below.

### **KVK, Amravati-I**

- Assess potential for Bio-fortified varieties of crops
- TSP on mushroom and millets in melghat should be linked to nutrition issue
- Revisit trials on INM and Ambia Bahar in mandarin; how long such repetitive trials?

#### **Summary of proposed KVK activities**

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	10	50	26	76
2	Front Line Demonstration	30	360	145	505
3	CFLD (O & P)	04	150	25	175
4	Training Programmes				
4.1	Farmers / Farm Women	85	1364	596	2055
4.2	Rural Youth	25	485	187	672
4.3	Extension Functionaries	12	236	79	327
5	Extension Activities (Major)	95	4368	1973	6422

### **KVK, Amravati-II**

- Mushroom has marketing problem, focus on consumption by locals
- Review OFT's and FLD's after assessing its relevance and repetitiveness

#### **Summary of proposed KVK activities**

Sr. No	Activity	No. of Program	No. of Participants		
			Male	Female	Total
1	On Farm Trials	11	69	42	111
2	Front Line Demonstration	15	352	60	412
3	CFLD (O & P)	03	200	50	250
4	Training Program				
4.1	Farmers / Farm Women	101	1800	700	2500
4.2	Rural Youth	17	215	125	340
4.3	Extension Functionaries	10	140	60	200
5	Extension Activities (Major)	12	13000	2000	15000

### **KVK, Buldhana-I**

- Assess Sub-soiler in rainfed condition as component of moisture conservation
- Revisit assessment of bahar management

### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	14	106	18	124
2	Front Line Demonstration	19	264	116	380
3	CFLD (O & P)	05	145	30	175
4	Trainings				
4.1	Farmers / Farm Women	56	950	205	1155
4.2	Rural Youth	13	214	66	280
4.3	Extension Functionaries	09	400	76	476
4.4	Vocational Training	07	86	44	130
5	Extension Activities (Major)	481	10695	2346	13041

### KVK, Buldhana-II

- Revisit the routine OFT's and FLD's like pigeon pea wilt, brijjal fruit-shoot borer etc
- Plan assessments and demonstrations on most relevant and burning issues in KVK jurisdiction

### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	12	100	38	138
2	Front Line Demonstration	10	80	22	102
3	CFLD (O & P)	4	180	20	200
4	Training				
4.1	Farmers / Farm Women	48	1204	665	1869
4.2	Rural Youth	15	471	150	621
4.3	Extension Functionaries	15	400	107	507
5	Extension Activities (Major)	379	2,00,000	20106	220,106

### KVK, Yavatmal-I

- Initiate trials on crop residue management
- Report pest surveillance results
- Revisit repetitive trials on Pigeon pea wilt, chick pea wilt etc
- Focus on agro-processing enterprises as income generating activity
- Assess techno-economic feasibility of Kisan drone for spraying

### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	10	80	20	100

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
2	Front Line Demonstration	08	194	112	306
3	CFLD (O & P)	Oilseed -2 Pulses-2	41 82	09 18	50 (O) 100 (P)
4	Training Programmes	115	2875	1357	4232
4.1	Farmers / Farm Women	93	2451	973	3424
4.2	Rural Youth	09	214	151	365
4.3	Extension Functionaries	13	210	233	443
5	Extension Activities (Major)	458	1,58,499	52,761	2,11,260

### KVK, Akola

- Many KVK's are working on Shelf Life of Pearl Millet flour. ATARI may assign this task to Akola KVK and close the trials by other KVKs as recommendation by one KVK applies to all
- Natural farming model may be assessed as per standard operational package given by source organization.
- KVK should document innovative extension methods evolved
- KVK should have mother block for rootstock and scion and develop nursery for good quality planting material

### KVK, Washim

- Appreciate branding of Mandarin quality
- Revisit trial on GA spray on soybean. Refer to experts from SAU.
- Promote direct sowing of Onion seeds by onion planter
- Promote insulated fish bags
- Present economics of IFS module

### Summary of proposed KVK activities

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	14	124	38	162
2	Front Line Demonstration	15	136	206	342
3	CFLD (O & P)	07	410	40	450
4	Training Programmes				
4.1	Farmers / Farm Women	71	1495	425	1920
4.2	Rural Youth	18	295	160	455
4.3	Extension Functionaries	10	155	60	215
5	Extension Activities (Major)	185	12257	3570	15827

### Comments from Chairman : Dr. V.M. Mayande, Former VC, PDKV, Akola

- A good work done by KVK Durgapur not reflected in presentation



- All routine type OFTs and FLDs going on for long needs to be revisited and new relevant OFTs should be initiated.
- OFT's on climate resilience should be initiated by all KVK's
- ATARI should organize a special workshop to prepare criteria for discarding old and routine OFT's and FLD's and also for initiating new assessment and demonstration programs in various disciplines
- ATARI should also organize a workshop for developing criteria for selection of training topics. Impact assessment of trainings should be reported by all KVK's.
- Mushroom in tribal area has to be taken as nutrition supplement. KVKs has to work on market linkages
- The work on shelf life of bajra flour should be assigned to food/home science faculty in KVK Akola and need not be repeated by all.

**Comments from Co- Chairman : Dr. T. K. Narute, DEE MPKV, Rahuri**

- KVK must highlight work on millets
- KVKs should revisit on number of programmes planned in a year.

**Comments from Co-Chairman : Dr. D. B. Deosarkar, DEE, VNMKV, Parbhani**

- JS-335 is old variety so replace it.
- No meaning for wilt management in tur in early stages as wilt occurs after 150 days of sowing
- Management in fruit drops in citrus
- Replace chick pea with safflower or try to take both crops
- Increase area of oilseed especially safflower

**Comments from expert: Dr. S.K. Das, Principal Scientist, IVRI, Pune**

- Try for piggery in Amaravati district and also in other tribal areas
- Go for Bellary goat and Red Kandhari cattle in Washim district and performance of Jamunapari goat in Washim has to be assessed
- Assess breeding performance of cattle

**Comments from expert Dr. S.K. Kamble, Associate Professor, MPKV, Rahuri**

- Adopt technologies like stubble collector, drones
- Adopt fish bag technology in Konkan region

**Comments from expert Professor M. R. More, VNMKV, Parbhani**

- Khar pan patta technologies to be added in action plan
- For Yavatmal district, focus on cotton growing areas, farmers and educate farmers for efficient use of pesticide and fertilisers
- Concentrate rain water harvesting in dry land areas by all KVKs

### Comments from expert Dr. P.H. Nikumbhe, Scientist, NRCG

- Take demonstrations on new crops like grapes
- Horti+Agro+Vegetables must be included in IFS model
- Take demonstrations on irrigation models
- Use clean planting material in nursery

### Technical Session V:

11.30-13.30 hrs	<b>Presentation of Action Plan 2023 by KVKs (10 minute presentation +2 minute discussion)</b>	
	<b>Rapporteurs</b>	Dr. V. G. Vairagar, SMS, KVK, Solapur-II Tushar Athare, Scientist, ICAR-ATARI, Pune
	<b>Presentation by 8 KVKs</b>	Nagpur-I, Nagpur-II, Wardha, Chandrapur, Bhandara, Gondia, Gadchiroli, Hingoli, Yavatmal-I

09 KVKs from Maharashtra presented their Action Plan for the year 2023 during the fifth technical session. Recommendations given by Chairman, Co chairman are enlisted below.

### **KVK, Nagpur-I**

- Document innovative extension methods
- Revisit OFT's/FLD's of routine nature and plan new with expert consultations

### **Summary of proposed KVK activities**

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	10	110	46	156
2	Front Line Demonstration	11	85	25	110
3	CFLD (O & P)	3	130	20	150
4	Training Programmes	105	2396	1405	3801
4.1	Farmers / Farm Women	58	1395	837	2232
4.2	Rural Youth	28	616	326	942
4.3	Extension Functionaries	19	385	242	627
5	Extension Activities (Major)	245	24972	7436	32408

### **KVK, Nagpur-II**

- No planning for instructional farm
- ATARI may review and help in planning sound program as this is relatively new KVK

### **Summary of proposed KVK activities**

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	02	20	10	30
2	Front Line Demonstration	02	20	10	30
3	CFLD (O & P)	03	100	25	125

S. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
4	Training Programmes	10	155	55	210
4.1	Farmers / Farm Women	05	80	30	110
4.2	Rural Youth	03	45	15	60
4.3	Extension Functionaries	02	30	10	40
5	Extension Activities (Major)	20	-		

### KVK, Wardha

- Promote BBF for soybean and chickpea crops
- Focus on crop residue management
- Focus on IFS modules, data acquisition and economic analysis

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	10	82	24	106
2	Front Line Demonstration	08	66	21	87
3	CFLD	04	165	35	200
4	Training Programmes				
4.1	Farmers / Farm Women	43	935	280	1215
4.2	Rural Youth	22	370	180	550
4.3	Extension Functionaries	14	410	160	570
5	Extension Activities (Major)	38	10375	5625	16000

### KVK, Chandrapur

- Promote drilling of paddy using drum seeder
- Plan a Trial on Happy Seeder/No-till drill for mustard after rice
- Focus on IFS rice based model

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	08	90	14	104
2	Front Line Demonstration	08	70	28	98
3	CFLD (Oilseed & Pulses)	06	200	75	275
4	Training Programmes				
4.1	Farmers / Farm Women	70	1550	600	2100
4.2	Rural Youth	10	200	100	300
4.3	Extension Functionaries	10	200	100	300
5	Extension Activities (Major)	20	2000	500	2500

### **KVK, Bhandara**

- Initiate trial on paddy drilling using drum seeder
- Use Zero-till drill for rabi sowing in paddy field

#### **Summary of proposed KVK activities**

<b>Sr. No</b>	<b>Activity</b>	<b>No. of Programmes</b>	<b>No. of Participants</b>		
			<b>Male</b>	<b>Female</b>	<b>Total</b>
<b>1</b>	On Farm Trials	10	91	39	130
<b>2</b>	Front Line Demonstration	10	95	35	130
<b>3</b>	CFLD (O & P)	200	140	60	200
<b>4</b>	Training Programmes	90	2018	958	2976
<b>4.1</b>	Farmers / Farm Women	73	1668	778	2446
<b>4.2</b>	Rural Youth	8	159	91	250
<b>4.3</b>	Extension Functionaries	3	71	29	100
<b>5</b>	Extension Activities (Major)	33	6565	5605	12170

### **KVK, Gondia**

- Initiate trial on Drum Seeder for paddy drilling
- Trial on Vertical conveyor reaper for paddy harvesting
- KVK should promote branding and direct marketing of vegetables

#### **Summary of proposed KVK activities**

<b>Sr. No</b>	<b>Activity</b>	<b>No. of Programmes</b>	<b>No. of Participants</b>		
			<b>Male</b>	<b>Female</b>	<b>Total</b>
<b>1</b>	On Farm Trials	10	100	30	130
<b>2</b>	Front Line Demonstration	08	68	30	98
<b>3</b>	CFLD (O & P)	04	145	30	175
<b>4</b>	Training Programmes	79	2015	825	2840
<b>4.1</b>	Farmers / Farm Women	40	920	460	1400
<b>4.2</b>	Rural Youth	19	485	160	645
<b>4.3</b>	Extension Functionaries	14	475	135	610
<b>5</b>	Extension Activities (Major)	139	3210	1580	4790

### **KVK, Gadchiroli**

- Initiate trial on Paddy based natural farming model
- ATARI should organize a separate review and planning meeting for KVK to make efficient use of bulk funds flow from district authorities

#### **Summary of proposed KVK activities**

<b>Sr. No</b>	<b>Activity</b>	<b>No. of Programmes</b>	<b>No. of Participants</b>		
			<b>Male</b>	<b>Female</b>	<b>Total</b>
<b>1</b>	On Farm Trials	12	106	50	156

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
2	Front Line Demonstration	14	150	32	182
3	CFLD (O & P)	10	350	100	450
4	Training Programmes				
4.1	Farmers / Farm Women	44	1832	600	2432
4.2	Rural Youth	31	800	95	895
4.3	Extension Functionaries	22	750	150	900
5	Extension Activities (Major)	58	7234	800	8034

### KVK, Hingoli

- It is turmeric belt, so focus on turmeric processing technology from PDKV Akola
- Explore Rajma as diversified crops
- Promote vegetable preservation using zero energy vegetable preservation.

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	14	198	37	235
2	Front Line Demonstration	12	190	90	280
3	CFLD (O & P)	3	87	38	125
4	Training Programmes	70	1011	581	1592
4.1	Farmers / Farm Women	50	659	373	1032
4.2	Rural Youth	11	205	105	310
4.3	Extension Functionaries	9	147	103	250
5	Extension Activities (Major)	148	2352	1605	3957

### KVK, Yavatmal-II

- Initiate trial on mechanically harvestable chickpea variety
- Promote sesame and safflower in rabi season
- Revisit trail on Oyster mushroom after assessing market potential

#### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	10	80	20	100
2	Front Line Demonstration	08	194	112	306
3	CFLD (O & P)	Oilseed -2	41	09	50 (O)
		Pulses-2	82	18	100 (P)
4	Training Programmes	115	2875	1357	4232
4.1	Farmers / Farm Women	93	2451	973	3424
4.2	Rural Youth	09	214	151	365
4.3	Extension Functionaries	13	210	233	443



Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
5	Extension Activities (Major)	458	1,58,499	52,761	2,11,260

**Comments from Chairman: Dr. V.M. Mayande, Former VC, PDKV, Akola**

- Eastern Vidarbha KVK's to assess the farm ponds for supplemental irrigation
- For new variety of paddy PDKV tilak, assess the milling quality of rice
- Direct seeded rice technology using drum seeder must be popularized
- Take OFT on linseed after paddy crop
- All KVK's should review all routine type of OFTs/FLD's and plan new in most challenging areas like climate resilience, IFS, Entrepreneurship and agri commodity markets, postharvest management, Value chain studies etc
- Focus on income generation activities rather than enhancing productivity alone
- Promote cash crops/high value crops like sunflower, sesame, Linseed in rabi season

**Comments from Co-Chairman : Dr. T. K. Narute, DEE MPKV, Rahuri**

- Gram wilt is soil borne disease due to monoculture of pulses. Use of resistant varieties and change in cropping pattern for wilt management to be followed by KVKs.

**Comments from Co-Chairman : Dr. D. B. Deosarkar, DEE, VNMKV, Parbhani**

- Add the PDKV Kabuli type variety in chick pea
- Nagpur-I : Focus on reddening of cotton

**Comments from expert: Dr. S.K. Das, Principal Scientist, IVRI, Pune**

- In tribal area, try to introduce piggery and rabbit farming especially for aspirational districts

**Comments from expert Dr. S.K. Kamble, Associate Professor, MPKV, Rahuri**

- Scented variety in rice to be taken in rice growing areas.

**Comments from expert Professor M. R. More, VNMKV, Parbhani**

- Adopt farm ponds

**Comments from expert Dr. P.H. Nikumbhe, Scientist, NRCG**

- Include floriculture aspects in demos

**Comments from expert Dr. Umesh Chinchmalatpure, CEEO, DEE Office Nominee, DR. PDKV, Akola**

- KVK Akola – measure the impact of QR code method

- KVK Gondia – Crop diversification needed
- Study on Impact of KVK program should be presented

### **Technical Session VI:**

<b>14.00-16.15 hrs</b>	<b>Presentation of Action Plan 2023 by KVKs (10 minute presentation +2 minute discussion)</b>	
	<b>Rapporteurs</b>	Dr. Rajendra S. Dahatonde, Head, KVK, Nandurbar Dr Rajesh T, Scientist, ICAR-ATARI, Pune
	<b>Presentation by 9 KVKs</b>	Aurangabad –I, Aurangabad –II, Jalna-I, Jalna-II, Parbhani, Nanded-I, Nanded-II, Beed-I, Beed-II
<b>16.00-16.15 hrs</b>	<b>Remarks of Chair and Co-chairs</b>	

During the last technical session, 09 KVKs presented the Action Plan for the year 2023. Recommendations from Chairman and cochairman and experts are as below.

### **KVK, Aurangabad-I**

- Focus on management of bacterial blight in pomegranate
- CRIDA planter is proven technology, organize demonstrations and trainings
- Assess Solar drying of different commodities in jurisdiction
- Focus on sweet orange value chain and address missing links
- All KVK's should present Impact analysis of OFT's/FLD's/Trainings/Extn activities

### **Summary of proposed KVK activities**

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	11	92	20	112
2	Front Line Demonstration	17	210	100	310
3	CFLD (O & P)	05	200	50	250
4	Training Programmes	104	2772	889	3661
4.1	Farmers / Farm Women	57	1680	620	2300
4.2	Rural Youth	27	577	144	721
4.3	Extension Functionaries	20	455	125	580
5	Extension Activities (Major)	785	6463	1512	7975

### **KVK, Aurangabad-II**

- Focus on assessment of protective cultivation of different crops
- Assess STCR and IPM for cost effectiveness

### **Summary of proposed KVK activities**

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	20	210	33	243
2	Front Line Demonstration	21	280	30	310
3	CFLD (O & P)	04	80	20	100

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
4	Training Program				
4.1	Farmers / Farm Women	61	868	402	1270
4.2	Rural Youth	08	130	35	165
4.3	Extension Functionaries	07	110	40	150
5	Extension Activities (Major)	203	2705	665	3370

### KVK, Jalna-I

- Assess the productivity and economics of Rajma
- Trials of moringa leaves for value added products
- Osmanabadi goat trials are going on for long, all trials should be close ended
- Demonstrate feasibility of cotton shredder machine

### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	15	107	46	153
2	Front Line Demonstration	23	355	120	475
3	CFLD (O & P)	04	175	0	175
4	Training Programmes				
4.1	Farmers / Farm Women	89	1750	250	2000
4.2	Rural Youth	16	400	300	100
4.3	Extension Functionaries	14	300	50	350
5	Extension Activities (Major)	274	8000	790	8790

### KVK, Jalna-II

- Trials of pests and diseases of pigeon pea are going on for long. Revisit and plan new relevant trials
- Focus OFT on Parbahni Shakti
- All KVK's should assess feasibility of group farming model

### Summary of proposed KVK activities

Sr. No.	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials (OFT)	17	100	70	170
2	Front Line Demonstration (FLD)	16	100	60	160
3	CFLD (O & P)	04	75	50	125
4	Training Programmes				
4.1	Practicing Farmers / Farm Women (PF)	60	1000	500	1500
4.2	Rural Youth (RY)	25	300	150	450
4.3	Extension Functionaries (EF)	25	300	150	450
5	Extension Activities (Major)	50	5000	1500	6500

## KVK, Parbhani

- Promote mushroom consumption as nutrifood
- Initiate assessment of STCR and IPM for cost effectiveness
- Assess the clean milk production and mastitis control

### Summary of proposed KVK activities

Sr. No.	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	15	115	40	155
2	Front Line Demonstration	15	120	130	250
3	CFLD (O & P)	05	225	25	250
4	Training Programmes				
4.1	Farmers / Farm Women	71	1855	710	2565
4.2	Rural Youth	17	420	195	615
4.3	Extension Functionaries	18	540	275	815
5	Extension Activities (Major)	737	16750	2500	19250

## KVK, Nanded-I

- Assess dragon fruit production and economics
- Straw berry productivity and economics may not favorable, deemphasize such trials
- Take trials on crop residue management

### Summary of proposed KVK activities

Sr. No	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	19	255	65	320
2	Front Line Demonstration	17	205	120	325
3	CFLD (O & P)	05	150	50	200
4	Training Programmes	125	1968	1165	3133
4.1	Farmers / Farm Women	79	1209	588	1797
4.2	Rural Youth	30	522	367	889
4.3	Extension Functionaries	16	237	210	447
5	Extension Activities (Major)	61	4527	1314	5841

## KVK, Nanded-II

- Revisit all OFT's/FLD's and discard those of routine nature
- All trials should be close ended, Focus on quality output rather than number of trials
- Promote nutraceutical products of millets
- Assess economics of drone for spraying
- Focus on IPM,INM,IDM and STCR technologies for cost effectiveness

### Summary of proposed KVK activities

Sr.	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	22	276	65	341
2	Front Line Demonstration	18	174	68	248
3	CFLD (O & P)	6	210	15	225
4	Training Programmes				
4.1	Farmers / Farm Women	77	1104	242	1346
4.2	Rural Youth	18	200	119	319
4.3	Extension Functionaries	14	163	74	237
5	Extension Activities (Major)	141	2959	140	3099

#### KVK, Beed-I

- Assess crop residue management and climate resilient technologies
- Focus on group farming models and entrepreneurship development

### Summary of proposed KVK activities

Sr. No.	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	15	137	20	157
2	Front Line Demonstration	21	200	120	320
3	CFLD (Oil seed & Pulses)	06	100	50	150
4	Training Programmes	100	1592	480	2072
4.1	Practicing Farmers / Farm Women	71	1201	352	1553
4.2	Rural Youth	15	183	39	222
4.3	Extension Functionaries	14	208	89	297
5	Extension Activities (Major)	97	1546	283	1829

#### KVK, Beed-II

- Focus on postharvest management, entrepreneurship development, marketing and value chain assessment of different commodities rather than production alone

### Summary of proposed KVK activities

Sr. No.	Activity	No. of Programmes	No. of Participants		
			Male	Female	Total
1	On Farm Trials	14	95	50	145
2	Front Line Demonstration	15	108	102	210
3	CFLD (O & P)	2	30	20	50
4	Training Programmes				
4.1	Farmers / Farm Women	41	696	512	1208
4.2	Rural Youth	19	285	320	605
4.3	Extension Functionaries	16	279	347	626
5	Extension Activities (Major)	139	1200	3300	4500

## **Concluding Session**

### **Concluding comments from Chairman: Dr. V.M. Mayande, Former VC, PDKV, Akola**

- KVK's should focus on quality output of different programs rather than number of OFT's/FLD's/Trainings/extension activities
- Critical review of ongoing OFT's and FLD's may be organized at University level and irrelevant may be dropped and new assessments on climate resilience, IFS modules for sustainable income generation, Group farming models for ease of doing farming business, entrepreneurship development in production and postharvest sector should be prioritized rather than present focus on production technology alone.
- Focus should be on making more FPOs operational rather than registering more FPO.
- Make critical analysis of drone spraying technology, its feasibility and economics
- Assess shade net cultivation as climate resilient model and its economic feasibility
- Assess economics of bio-fortified varietal trials
- Initiate new programs on utilization of byproducts from fruits and vegetables
- After looking at various OFT's and FLD's proposed and ongoing at various KVK's, there is scope to discard about half of the old programs after critical review of its relevance.
- New proposals of OFT's/FLD's should be on challenging and emerging areas in agriculture sector with focus on potential of enhancing farmers income and sustainability
- Some unexplored areas like aromatic and medicinal plants be assessed as income generation activity by assessing its value chain
- Soil testing activity needs further expansion to link with soil improvement program. KVK's should initiate assessment on soil improvement models.
- Assess the replicability of NICRA project findings suggesting possible expansion of area.
- Each KVK should have program on work on rain water management as its major challenge due to changing rainfall pattern
- Identify and document the list of innovative farmers in KVK jurisdiction, recognize them appropriately and use them as resource persons in various KVK programs.
- Watershed centric development in Marathwada and western vidarbha region is prerequisite for rainfed crop management. Focus on integrated micro-watershed based farming model in this region.
- All KVK's should report number of OFT's converted into FLD's and FLD's into farmers practice.

### **Comments from Co-Chairman : Dr. T. K. Narute, DEE MPKV, Rahuri**

- Green manuring trials for improving soil health should be initiated by all KVK's

### **Comments from Co-Chairman : Dr. D. B. Deosarkar, DEE, VNMKV, Parbhani**

- All KVK's to assess recommended intercropping systems for sustainability and higher economic returns
- Don't include varieties susceptible to disease and pest in OFTs and FLDs
- Demonstrate feasibility of safflower crop

**Comments from expert: Dr. S.K. Das, Principal Scientist, IVRI, Pune**

- Analyze nutritional composition of fodder.

**Comments from expert Dr. S.K. Kamble, Associate Professor, MPKV, Rahuri**

- Vocational training must be implemented in KVKs
- Farmer scientist forum should be established
- Soil testing labs should be maintained

**Comments from expert Professor M. R. More, VNMKV, Parbhani**

- Focus on integrated water management
- Add crops like banana (Grand-9) and custard apple in OFT
- Each KVK should develop at least one ideal village

**Comments from expert Dr. P.H. Nikumbhe, Scientist, NRCG**

- There is a lacunae in demos of protected cultivation
- Also consider abiotic stress management in OFTs and FLDs
- Harvest water from field to a common point leading to farm pond which can be used during dry spell

**Comments from expert Dr. Umesh Chinchmalatpure, CEEO, DEE Office Nominee, DR. PDKV, Akola**

- KVKs have to present impact assessment of major activities during planning meetings



## Valedictory Session

Time	Programme	Speakers
16.30 – 16.35 hrs	Welcome of the guests	
16.35 – 16.50 hrs	Overview of the Workshop	Dr. Kaushik Banerjee, Director, ICAR-ATARI, Pune
16.50 – 16.55 hrs	Remarks by co-chair of Technical Session	Dr. T. K. Narute, DEE, MPKV, Rahuri
16.55 – 17.00 hrs	Remarks by co-chair of Technical Session	Dr. D. B. Deosarkar, DEE, VNMKV, Parbhani
17.00 - 17.10 hrs	Remarks by Chair of Technical Session	Dr. V. M. Mayande, Former Vice Chancellor, PDKV, Akola
17.10 - 17.25 hrs	Address by the Chief Guest	Dr. Indra Mani Mishra, VC, VNMKV, Parbhani
17.25 -17.30 hrs	Vote of Thanks	T. R. Athare, Scientist, ICAR-ATARI, Pune

Valedictory Session was organized on 23 February 2023 at 04.30 pm. Dr. Kaushik Banerjee, Director, ICAR-ATARI; Pune gave the overview of the workshop. It was also briefly discussed that a pilot project on “Targeting technologies to agro-ecological zones - large scale demonstrations of best practices to enhance cotton productivity” is under active consideration for implementation by ICAR-CICR Nagpur in Public Private Partnership mode involving all stakeholders during kharif 2023-24 by adopting a cluster based & value chain approach in 57 districts across 8 cotton growing states. Identified KVKs in Maharashtra & Gujarat will provide training & extension services for demonstrations on high & medium density planting of cotton using approved compact genotypes with canopy management. Farmers will be provided technology assistance through direct benefit transfer mode. Seed & textile industry partners with extension, monitoring & reporting support by KVKs, will conduct demonstrations. Each KVK will be provided field manpower support & machinery assistance. 15 KVKs in Maharashtra & 3 KVKs in Gujarat will include project activities in their action plan for 2023-24 season & identify PI & Co-PI of the project.



Dr. T. K. Narute, DEE, MPKV, Rahuri co-chaired technical sessions of KVKs during the workshop and guided the KVKs. During his remarks at valedictory session of the workshop, he highlighted the importance of millets and advised KVKs to include millet related activities in their action plan for the year 2023.

Dr. D. B. Deosarkar, DEE, VNMKV, Parbhani also co-chaired technical sessions of the action plan workshop and reviewed the action plan of KVKs. His salient remarks are given below.

- Do not recommend soybean in summer season for farmers
- All KVKs should have demonstration on millet and more millets varieties are to be included in crop cafeteria at KVK farm.

- Nutritional garden must be compulsorily taken up by all KVKs.
- All KVK's should assess incorporation of crop residue and trash in soil for enhancing organic carbon level
- He also advised to follow intercropping in rabi sorghum and promotion of Parbhani Shakti, Parbhani Moti and bio fortified varieties of millets.
- Intercropping of Arhar and sorghum must be increased.
- Linseed area should be increased and KVKs should take FLDs of linseed crop.

Chairman of Technical Session of the workshop Dr. V. M. Mayande, Former VC, PDKV, Akola in his remarks commented about

- Millets play an important role in meeting nutrition hunger. Increasing production and consumption of minor millets alongside major millets will address the nutritional concern. .
- Maharashtra has largest area under soybean crop however, in spite of being rich source of protein, Soya food processing is very low level. KVK's should have a demo unit on Soyfood processing and promote its consumption by local population, as it is cheapest source of protein.
- Promotion of Millet, Soybean, Pulse alongside local fruits and vegetables in consumption will provide solution to nutritional security of country. KVK's should promote consumption of such a combination of local food
- Bamboo cultivation economics and feasibility in the long run may be assessed critically before blanket promotion of crop.
- All soils are organic carbon deficient, so focus to be given to improve organic carbon
- All KVKs deserve compliments for their contribution in control of lumpy skin disease
- Lastly, all KVK's are doing good work and such critical reviews will help in channelizing KVK's in right direction.
- I thank the Director, ATARI for inviting me to Chair all six technical sessions of Maharashtra KVK's

## Photos

### Visit to Grape vineyard at ICAR-NRC Grapes, Pune



### Group Photo during Annual Action Plan Workshop of KVKs of Maharashtra at ICAR-NRC Grapes, Pune







भाकृअनुप-कृषि प्रौद्योगिकी अनुप्रयोग अनुसंधान संस्थान (अटारी)  
जोन-८

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