

KRISHI VIGYAN KENDRA, MOHOL

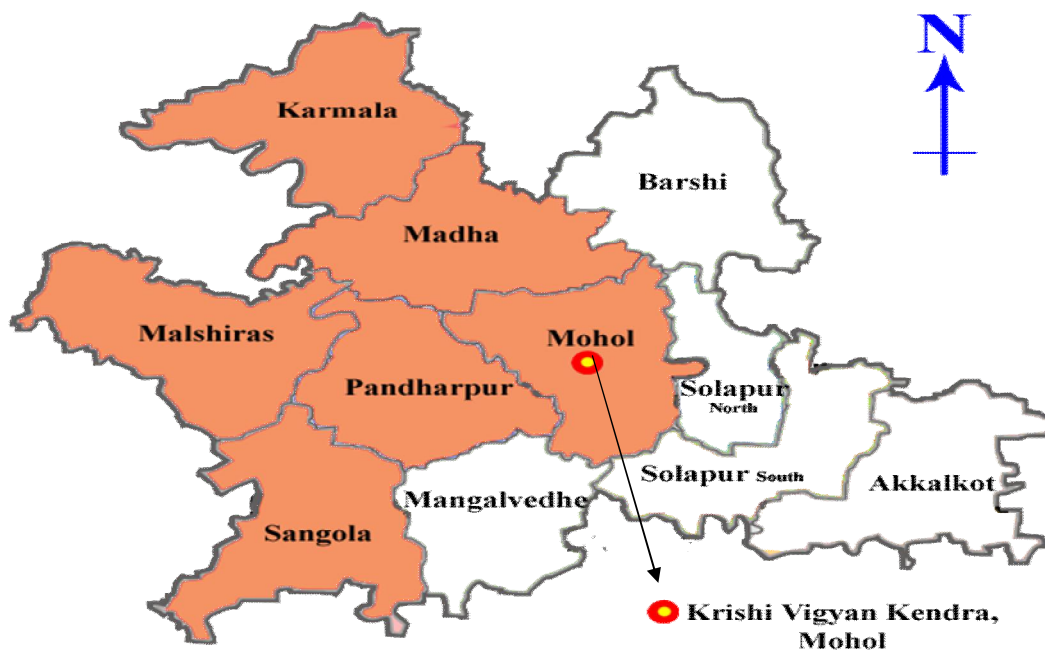
District Profile

District: Solapur

State: Maharashtra

Krishi Vigyan Kendra, Mohol established in year, 2011 for the 6 Tahsils in Solapur district i.e. Mohol, Pandharpur, Malshiras, Madha, Sangola and Karmala for implementing various agricultural activities as per the needs of farmers of different localities. These tahsils are having different cropping patterns and which includes crops like sorghum, wheat, sugarcane, vegetables (brinjal, tomato, okra, chilli, leafy vegetables, watermelon, cucumber, cluster bean etc.) and fruits (pomegranate, grapes, papaya, banana, Ber, lime, mango etc.). KVK function in various crop production technical trainings, crop demonstrations and on farm trials and organizes training to the rural youth for self-employment and working as extension functions for new agricultural production technologies.

KVK activities are being focused to increase the crop production levels of a local farmer. KVK also provides various inputs and services to farmers such as soil/water/plant/fertilizers testing, bio-fertilizers and bio-pesticides, vermicompost, vermiwash at reasonable rate.



1.1 General census

Geographical:			
Latitude	17.1 ⁰ - 18.32 ⁰ N		
Longitude	74.42 ⁰ ó 76.15 ⁰ E		
Altitude	457.2 M		
Geographical area (sq.km)	14.895		
Temperature(annual average)	Maximum: 40.4 ⁰ c	Minimum: 12 ⁰ c	
Average rainfall	537 mms.		
Population:			
Persons	3850000	Number of households	-
Males	1990000	Household size (per household)	-
Females	1860000	Sex ratio (females per 1000 males)	935
Growth (1991 ó 2001)		Sex ratio	934 female per 1000 male
Rural	2624000	Scheduled tribe population	68000
Urban	1225000	Percentage to total population	1.79
Scheduled caste population	578000		
Percentage to total population	15.02		
Literacy and educational level			
Literacy rate (%)		Educational level attained	
Rural	68.26	Total	-
Arban	77.51	Without level	1138
		Below primary	4893
Literacy rate (%)		Primary	225000
Persons	71.2	Middle	10575
Males	81.99	Matric/Higher Secondary/Diploma	180000
Females	59.84	Graduate and above	54250
Workers		Age groups	
Total workers	-	0 ó 6 years	569609
Main workers	-	7 - 14 years	731742
Marginal workers	-	15 - 59 years	2175406
Non-workers	-	60 years and above (Incl. A.N.S.)	372786
Scheduled castes (Largest three)	538000	Scheduled tribes (Largest three)	68000
1.Mahar etc.	-	1.Koli mahadev etc.	-
2.Mang etc	-	2.Thakur etc	-
3.Bhambi etc	-	3.Bhil etc.	-
Religions (Largest three)		Amenities and infrastructural facilities	
1.Hindus	3386955	Total inhabited villages	1150
2.Muslims	377579	Amenities available in villages	No. of villages
3.Buddhists	38497		
Important Towns		Safe Drinking water	3022
		Electricity (Power Supply)	2632.16 Million KWHr

1.Pandharpur		Electricity (domestic)	243.2 Million KWHr
2.Madha		Electricity (Agriculture)	1657.32 Million KWHr
3.Barshi		Primary school	72053000
Medical facility		Middle schools	20339000
Primary Health Centre	77	College	3243000
Primary Health Sub-Centre	425	Post, telegraph and telephone facility	
House Type			
Type of house (% of households occupying)		Post	533
Permanent	1383	Telegraph	1563
Semi-permanent	-	Telephone	92971
Temporary	-		

(Source: Census of India, 2001)

**1.2. Agricultural census,
Table: Number and area of holding by size group**

State: Maharashtra

District: Solapur

Social group: All social groups

Gender: Total

Sr. no.	Size of holding (in ha)	Individual holdings		Joint holdings		Sub-Total (Individual + Joint)		Institutional holdings		Total holdings	
		Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Marginal	74759	42957.0	7789	3862.0	82548	46819.0	NA	NA	82548	46816.0
2	Small	98491	145212.0	7484	11052.0	103275	156264.0	NA	NA	105975	156264.0
3	Semi medium	124878	386504.0	12177	38728.0	137055	425232.0	NA	NA	137055	425232.0
4	Medium	43062	292797.0	6513	45726.0	49575	338523.0	NA	NA	49569	338523.0
5	Large	13168	195967.0	3276	51740.0	16444	247707.0	NA	NA	16444	247707.0
6	All Classes	324358	1063437.0	37239	151108.0	361597	1214545.0	NA	NA	391591	1214545.0

1.3 Irrigated and lift irrigation facilities in district

Dist: Solapur											
Sr. no	Tahsil	Major project	Medium project	Minor irrigation project		Percolated tank	K.T. weir	Storage Tank	Well	Agril. pump	
				State	Local					Diesel pump	Electric pump
1	Mohol	-	-	1	-	289	70	7	883	-	21993
2	Karmala	-	1	10	-	67	52	11	927	-	18433
3	Madha	-	-	3	-	81	69	26	1108	-	23986
4	Pandharpur	1	-	-	-	35	37	11	697	265	32714
5	Malshiras	-	-	-	-	96	76	24	1093		31296
6	Sangola	-	1	-	-	117	68	12	652	335	19762
7	Barshi	-	6	12	-	113	108	10	1566	-	16873
8	North Solapur	-	1	1	-	57	54	2	426	-	8503
9	Mangalwedha	-	-	-	-	90	54	8	532	-	13099
10	South Solapur	-	-	3	-	78	56	12	712	-	16011
11	Akkalkot	-	2	8	-	67	85	19	1093	-	15145
Total		1	11	38	0	1090	729	142	9689	600	217815
Base: Executive engineer, irrigation department.										Ref year: 2009-10	

1.4 A) Estimated area by land use of Solapur district

Sr. No	Land	Area (sq. Km)
1	Agricultural area.	11480
2	Cultivable not in use	380
3	Non-agricultural	690
4	Grass lands and herbs	720
5	Forest cover	350
6	Wastelands	1260
7	Draught prone areas (All eleven tehsils)	14844.6

Agro-climatically entire district comes under rain shadow area. Rainfall is uncertain and scanty. The monsoon period is from second fortnight of June to end of September.

B) Tahsilwise estimated area by land use of Solapur district

Sr. No.	Tahsil	Total geographic area (ha)	Area under forest (ha)	Land not available for cultivation(ha)			Land not available for cultivation excluding uncultivable land(ha)
				Area under non cultivable agril. land	Uncultivable/ Waste land	Total (5+6)	
1	2	3	4	5	6	7	8
1	Mohol	131689	1591	767	11779	12546	0
2	Karmala	159580	5948	558	10574	11132	738
3	Pandharpur	129437	5411	1304	6048	7352	3142
4	Malshiras	160801	344	708	5040	5748	19788
5	Sangola	159431	680	2405	12368	14773	3906
6	Madha	152600	2584	2209	2284	4493	1380
7	Barshi	152250	2204	1478	5426	6904	940
8	North.Solapur	68303	2133	2016	1945	3961	1129
9	Mangalwedha	114159	7080	1589	2223	3812	2378
10	South.Solapur	119463	1827	2563	2065	4628	194
11	Akkalkot	140130	2145	229	3639	3868	0
Total district		1487843	31947	15826	63391	79217	33595

Sr. No.	Tahsil	Waste land (ha)			Net area (ha)	Greater than one (Dusota area)(ha)	Total land under cultivation (12+13)(ha)	Cultivable land (ha)
		Current waste land	Other waste land	Total (9+10)				
1	2	9	10	11	12	13	14	15
1	Mohol	14422	11863	26285	91092	3276	94368	120653
2	Karmala	7417	8815	16232	118530	2979	121509	138479
3	Madha	14444	15122	29566	108658	5964	114622	145568
4	Pandharpur	1527	5723	7250	106282	1867	108149	118541
5	Malshiras	17950	22000	39950	94227	4033	98260	157998
6	Sangola	40873	20734	61607	64380	2979	67359	132872
7	Barshi	7394	6225	13619	123129	3682	126811	141370
8	North.Solapur	3641	6356	9997	50656	5562	56218	67344
9	Mangalwedha	14408	17680	32088	67146	3652	70798	105264
10	South.Solapur	7899	11361	19260	91573	3951	95524	114978
11	Akkalkot	12478	26123	38601	90802	4176	94978	133579
Total district		142453	152002	294455	1006475	42121	1048596	1376646

1.5 Estimated number of operational holding and irrigation status of Solapur district and Maharashtra state

Sr. No.	Irrigation status	Solapur district		Maharashtra state	
		Number	Area (ha)	Number	Area (ha)
1	Total holding		1048596	12137627	20102805
2	Wholly irrigated holding	74376	99529.0	1379141	1433177
3	Wholly unirrigated holding	221305	555294.0	9322131	13883473
4	Partially irrigated holding	91448	327378.0 (total)	1118381	2416161
			104922 (irrigated)		946590 (irrigated)
5	Holding receiving irrigation	-	-	2497522	2379767

1.6 Estimated gross cropped area of Solapur district and Maharashtra state

Sr. No.	Area (ha)	Solapur district	Maharashtra state
1	Total Holding	1048596	20102805
2	Gross cropped area		
A	Irrigated	204592.0	2439492
B	Unirrigated	555294.0	15932419
C	Total	759886.0	18371915

1.7. Agroclimatic zones of Solapur district

Sr. No.	Agroclimatic zone	Rainfall (mm)	Tehsils	Crops grown
1	Central or Transitional zone	538.63	Mohol, Mangalwedha, eastern part of Pandharpur and Madha	Kharif and rabi crops
2	Scarcity zone	537.4	Barshi, Solapur, Akkalkot, Karmala, Sangola, Malshiras and western parts of Pandharpur	Sorghum, Bajra and Wheat in rabi ,pulses Tur in kharif

1.8. Area of Solapur district under KVK, Mohol jurisdiction

Sr. No.	Agroclimatic zone	Rainfall (mm)	Tehsils	Crops grown
1	Central or Transitional zone	538.63	Mohol, eastern part of Pandharpur and Madha	Kharif and rabi crops
2	Scarcity zone	537.4	Karmala, Sangola, Malshiras and western parts of Pandharpur	Sorghum, Bajra and Wheat in rabi, pulses Tur in kharif

1.9 Description of agro-climatic zone & major agro ecological situations (based on soil and topography) Agro-climatic zones of Solapur district under KVK, Mohol jurisdiction

Sr. No	Agro-climatic zone	Characteristics			
		Climatic conditions	Average annual rainfall	Soil type	Crop and cropping pattern
1.	Central or Transitional zone	Maximum temp. ranges from 29-39 C. Minimum temp ranges from 13-20 C.	538.63	Soils are predominantly deep soils having depth more than 90 cm	Bajra-gram/Safflower, Cowpea for fodder /Udid-rabi Sorghum, Sunflower-gram is major cropping systems. Pomegranate, Ber, Banana, Chilli, Brinjal, Leafy vegetables.
2	Scarcity zone	Maximum temp. ranges from 29-40 C. Minimum temp ranges from 13-20 C.	537.4	poor soil with low organic matter and poor moisture holding capacity	Rabi Sorghum, Bajra and Wheat are major cereals, among different pulses Tur in kharif and Bengalgram in rabi were grown extensively. Similarly Oilseed Sunflower &Safflower are grown on sizable area. Pomegranate, Ber, Chilli, Brinjal, Leafy vegetables

1.10 Agro ecological situations of Solapur district under KVK, Mohol jurisdiction

S.No.	Agro ecological situation	Distribution	Characteristics
1.	Rainfall Zone-I	Karmala, Pandharpur, Sangola, Madha Malsiras	<ul style="list-style-type: none"> - Getting less than 5 cm of rains from February to May, mostly in May, while remaining three months are almost dry. - During July receives 10-20 cm of rains. - In post monsoon season i.e. October to January, only one month i.e. October receives 5-10 cm of rains, whereas remaining three months get less than 5 cm of rainfall. - The amount and the extent of distribution of rains in Zone-I is adequate, erratic and irregular. - Soils under this zone are shallow, black with low rainfall & medium elevation, Bajra is mainly grown in kharif and Sorghum is grown in rabi season, other crops like Groundnut, Safflower, and Wheat are also grown.
2.	Rainfall Zone-IV	Mohol	<ul style="list-style-type: none"> - In this zone getting rains of 5 cm in pre-monsoon season mostly in May, whereas remaining months are dry. - In rainy season only 10-20 cm of rains occurs in June to September, while past rainy season only 5 cm of rains obtain mostly in October and remaining three months are observed to be dry. - Soils are shallow black soils did not differ significantly in properties as that of shallow soils in scarcity area. - Besides, Cereals, Pulses are equally grown over large area either as sole or intercropping. - Amongst the pulses, Tur, Mung and Udid are cultivated over large area, oilseeds also form an important component of cropping system.

1.11 Soil types of Solapur district

Sr. No	Soil type	Characteristics	Area (Ha)
1.	Deep soils	- Soil depth is more than 90 cms. - Water availability period exceeding 130 days. - 25% area of the district having deep soils (Tahsils : Akkalkot, North Solapur and South Solapur)	3,72,000
2.	Medium deep soils	- Soil depth is between 22.5 to 90 cms. - Water availability period exceeding between 100-130 days. - 45% area of the district having medium deep soils (Tahsils: Mohol, Barshi, Pandharpur, Madha and Mangalwedha)	6,69,600
3.	Shallow soils	-Soil depth is less than 22.5 cms. - Water availability period less than 100 days. - 30% area of the district having shallow soils (Tahsils: Malsiras, Karmala and Sangola)	4,46,400

2.1 District livestock population (exotic/crossbred breed)

Dist: Solapur				
Sr. No	Tahsil	Exotic/Crossbred cow and bull		
		Above 2.5 years age cow	Above 2.5 years age bull	Below 2.5 years cow heifers
1	Mohol	11934	1319	20087
2	Karmala	11866	1558	22688
3	Madha	17283	3987	33588
4	Pandharpur	17162	1451	30543
5	Malshiras	32303	2880	59558
6	Sangola	14273	1893	27000
7	Barshi	5752	467	10704
8	North.Solapur	1317	321	2650
9	Mangalwedha	8825	944	15396
10	South.Solapur	1919	229	3493
11	Akkalkot	1453	860	3458
	Total	124087	14909	229165
Base: Live stock census				Ref.year: 2003

2.2 District livestock population (indigenous/crossbred breed)

Dist: Solapur				
Sr. No	Tehsil	Indigenous/Crossbred cow and bull		
		Above 2.5 years age cow	Above 2.5 years age bull	Below 2.5 years cow heifers
1	Mohol	0	12285	11355
2	Karmala	0	18122	12070
3	Madha	0	11845	11319
4	Pandharpur	0	16326	26755
5	Malshiras	0	14038	20384
6	Sangola	0	12599	18402
7	Barshi	0	22383	12540
8	North.Solapur	0	8250	8335
9	Mangalwedha	0	8800	11930
10	South.Solapur	0	12787	12277
11	Akkalkot	0	20526	17440
	Total	0	157961	162907
Base: Live stock census				Ref.year: 2003

2.3 District livestock population (buffalo)

Dist: Solapur				
Sr. No	Tahsil	Buffalo		
		Above 3 years age buffalo bullock	Above 3 years age buffalo	Below 2.5 years heifers
1	Mohol	1197	11082	2729
2	Karmala	814	11996	2360
3	Madha	1646	12141	3477
4	Pandharpur	1002	38096	6476
5	Malshiras	1441	28125	6025
6	Sangola	1796	22285	5135
7	Barshi	355	16615	2618
8	North.Solapur	234	13742	1349
9	Mangalwedha	508	16828	3105
10	South.Solapur	359	17684	3567
11	Akkalkot	1168	19571	4809
	Total	10520	216165	41650
Base: Live stock census				Ref.year: 2003

2.4 District livestock population (other livestock)

Dist: Solapur									
Sr. No	Tahsil	Sheep	Goat	Horses	Donkeys	Others	Total Livestock	Total Hens	Total poultry Birds
1	2	3	4	5	6	7	8	9	10
1	Mohol	17542	79073	410	581	20314	197908	56777	118196
2	Karmala	12129	66549	83	76	16542	176853	58948	128772
3	Madha	8427	79165	938	19	13914	196749	57765	142354
4	Pandharpur	12564	107371	53	122	20582	278603	102997	212943
5	Malshiras	75517	124678	745	1571	28277	395542	160039	317087
6	Sangola	73129	97457	139	76	20031	294215	126056	255208
7	Barshi	4586	55864	84	61	12203	144232	46336	94625
8	North. Solapur	3346	32836	47	664	4653	77744	13069	76959
9	Mangalwedha	28953	81358	3529	216	15025	195417	101089	217688
10	South. Solapur	4765	48792	17	349	10727	116965	18529	53034
11	Akkalkot	11663	73011	47	152	18373	172531	20205	55273
	Total	252621	846154	6092	3887	180641	2246759	761810	1672139
Base: Livestock census								Ref year:2003	

2.5 Milk products from government and co-operative dairies

Dist: Solapur						
Sr. No.	Product	Unit	2007-08	2008-09	2009-10	% change in 2009-10 with respect to 2008-09
1	2	3	4	5	6	7
1	Milk Powder	MT	152	172.97	0	100
2	Butter	MT	106.56	129.48	0	100
3	Ghee	MT	40.15	105.4	103.67	1.64
4	Energy/ Milk	Bottles	1000	1655.2	2114.6	27.75
5	Lassi	Bottles	7733.4	4348	7634.8	75.59
6	Sweetened milk	Bottles	137394	146117	170458	16.66
7	Pasteurized cow milk	Bottles	0	0	0	0
Base: District milk development officer, Maharashtra state						

2.6 Information about farm equipments

Dist: Solapur										(Unit: Number)	
Sr. No	Tahsil	No of Plough		No. of Bullock carts	Sugar cane Juice Extractor		For Irrigated Land		No. of Tractor		
		Wooden	Iron made		Power employed	Manual	Diesel Pump	Electric Pump			
1	2	3	4	5	6	7	8	9	10		
1	Mohol	2529	2925	3643	42	143	1120	16827	428		
2	Karmala	1622	3780	3989	51	148	871	5746	504		
3	Madha	1157	4846	5351	14	218	2297	14594	705		
4	Pandharpur	1747	2122	2192	474	606	1825	9357	660		
5	Malshiras	1167	2470	3617	11	16	210	3941	653		
6	Sangola	1851	3733	3139	6	366	1047	7085	462		
7	Barshi	464	4624	3945	18	22	566	4863	302		
8	North Solapur	1218	1676	1267	2	9	94	1614	65		
9	Mangalwedha	4055	5129	5206	1	94	865	7184	431		
10	South Solapur	2388	2249	2233	63	296	318	2835	294		
11	Akkalkot	4960	5627	4145	112	123	678	4548	1107		
Total		23158	39181	38727	794	2041	9891	78594	5611		
Base: Agril. census										Reference year: 2003	

2.7 Agrobased and non-agrobased industries

Dist: Solapur										
Sr. No	Particular	* Agro based industries			Non-agro based industries			Agrobased and non agrobased industries		
		Rural	urban	Total	Rural	urban	Total	Rural	urban	Total
1	No. of industries									
	1.1 Self runned industries **	23537	506	24043	37202	28105	65307	60739	28611	89350
	1.2 Established***	9186	540	9726	32475	25591	58066	41661	26131	67792
	1.3 Total	32723	1046	33769	69677	53696	123373	102400	54742	157142
2	Types of industries based on ownership									
	2.1 Co-operative	381	1	382	1202	884	2086	1583	885	2468
	2.2 public	419	5	424	7809	1492	9301	8228	1497	9725
	2.3 Private	31923	1040	32963	60666	51320	111986	92589	52360	144949
3	Social group of owner									
	3.1 Scheduled caste	8.33	6.31	8.27	6.45	5.43	6.01	7.05	5.45	6.49
	3.2 Scheduled tribe	3.82	1.21	4.08	2.91	2.92	2.91	3.2	3.1	3.17
4	% of industries functioning without occupied land	51.1	13.58	49.96	16.71	9.27	18.47	27.71	9.35	2131
5	% of power employed industries	0.53	2.39	0.59	14.39	17.83	15.89	9.96	17.53	12.6
6	No. of routine workers	49091	2612	51403	189725	343784	203150	192037	395187	-
	6.1 Total no. of workers	49091	2612	51403	154059	189725	343784	203150	192037	395187
	6.2 Salaried workers	14296	1038	15334	92187	131398	223585	106483	132436	238916
	6.3 % of salaried workers with respect to total no. of workers	29.12	44.90	29.83	59.84	69.26	65.04	52.42	68.96	60.46
	6.4 Avg. no. of workers per industry	1.5	2.21	1.52	2.21	3.53	2.79	1.91	3.51	2.51
Note: * Agrobased industries excluding agril. products & farms. ** Industry not having single salaried workers. *** Industry having at least one salaried workers.										
Base: Department of economics & statistics, Maharashtra state, Mumbai.							Reference: economic census, 2005			

List of location specific problems

1. Improved varieties and hybrids of different agronomical crops viz. rabi sorghum and wheat.
2. IWM in agronomical crops.
3. Importance of soil sampling, testing and interpretation of results.
4. Balanced use of fertilizers (INM) and their method and time application.
5. Irrigation scheduling as per critical growth stage of crop viz. wheat
6. Improved cultivation of dry land crops.
7. Importance of sowing time and methods of agronomical crops
8. Awareness about agronomical practices viz. nipping in gram and drum rolling in groundnut.
9. Seed production of red gram, bengal gram, and wheat.
10. Importance of seed treatment and bio-fertilizers in all crops.

Jowar:-

- 1 Use of local variety
- 2 Inadequate plant population / ha.
- 3 Imbalance fertilizer use
- 4 Lack of seed treatment
- 5 Unawareness about biofertilizers

Maize:-

1. Use of local variety for fodder purpose.
2. Inadequate nutrient management.
3. Continuous use of maize on same piece of land
4. Non adoption of crop rotation

Red gram:-

1. Use of local variety
2. Low / uneven plant population
3. Inadequate nutrient supply
4. Lack of seed treatment and no use of bio- fertilizers
5. Occurrence of wilt and pod borers.

Wheat:-

1. Use of local variety.
2. Inadequate nutrient supply.
3. Lack of seed treatment & no use of bio-fertilizers.
4. No foliar application of fertilizers.

Groundnut:-

1. Use of local cultivar
2. Low / uneven plant population.
3. Lack of seed treatment.
4. Inadequate nutrient use.
5. Occurrence of Tikka & rust Disease.

Fruits:

1. Use of local root Stock
2. Incidence of pest and diseases
3. Lack of availability of water
4. Improper package of practices
5. Indiscriminate use of fertilizers, insecticides and fungicides.

Vegetables:

1. No use of pest monitory
2. Incidence of pest and diseases
3. Use of improper cultivation practices
4. Indiscriminate use of pesticides and fungicides
5. High Weed density.

Major problems identified

1. Use of local varieties of agricultural as well as horticultural crops.
2. Imbalance use of fertilizer and unavailability of fertilizers.
3. Inadequate irrigation facility
4. Unavailability of green fodder in summer.
5. Uneven plant population.
6. Unawareness of biofertilizers
7. No proper crop rotation/ mono cropping system.
8. Low milk yield.
9. Unawareness about mineral mixture for milking animal.
10. Labour problem.
11. Compactness of soil.
12. Lack of knowledge about post harvest handling and storage facility.
13. Unawareness about processing of agriculture produce.

Thrust areas

Agronomy

1. Increase productivity by enhancing the advanced technology
2. To make awareness about new varieties
3. Increase productivity of the crops by using INM.
4. Improving the soil health through incorporation of crop residues & its composting
5. Soil & Water conservation measures.
6. To make aware farmers about nutrient deficiencies and their control through soil test based fertilizer application.

Horticulture

1. Improper package of practices in fruits and vegetables cultivation
2. Indiscriminate use of fertilizers, pesticides and fungicides.
3. To aware about biofertilizers
4. Introduce the improved varieties of horticultural crops
5. To aware about processing of fruits and vegetables for value addition purpose
6. Protective cultivation of high value horticultural crops
7. Improvement in vegetable crop production

Soil science and agril. chemistry

1. Indiscriminate use of fertilizers
2. Introduce the Integrated Nutrient Management programme.
3. Improving the soil health through incorporation of Soil & Water conservation practices.
4. Lack of knowledge about soil testing.
5. Improve the soil health through incorporation of crop residues.
6. To aware farmers about nutrient deficiencies and their control through soil test based fertilizer application.

Animal science and dairy science

1. Scarcity of green fodder during summer.
2. Lack of knowledge about balanced feeding to cattle
3. Use of local breed in case of cattle, poultry, goatary
4. Unawareness about importance of mineral mixture in diet of cattle and buffallo
5. Lack of knowledge about vaccination schedule

Food science and technology

1. Introduction of scientific post- harvest technologies of crops
2. To aware about processing of fruits and vegetables for value addition purpose
3. To reduce laborious work through improved farm tools
4. To develop skills about Agricultural Processing
5. Empowerment of rural women through self-employment by SHG formation.

Technology inventory:

Sr. No	Technology	Crop/enterprise	Year of recommendation of technology	Source of technology	Reference/citation
1	Cv. Vipula + seed treatment	Pigeon-pea	2006	MPKV, Rahuri	Extn. Bulletin No. 540 PP No. 97
2	Cv. Phule vasudha	Sorghum	2007	MPKV, Rahuri	Krishidarshini-2008, PP No. 272
3	JL-501+ BBF	Groundnut	2010	MPKV, Rahuri, ICRISAT, Hyderabad	Krishidarshini 2011 pp. 62
4	Effect of growth regulators on fruit setting in Kagzi Lemon	Kagzi Lemon	-	Dr. PDKV, Akola	Krishidarshini
5	Planting of onion by raising nursery	Onion	-	MPKV, Rahuri	Krishidarshini
8	CV phule panchami for sorghum pops	Sorghum processing	2011	MPKV, Rahuri	Krishidarshani, 2011
9	Use of manual double screen cleaner	Grains	2003	CIAE ,Bhopal	CIAE catalogue
10	Phule fruit drink	Fruits	2012	MPKV, Rahuri	Krishidarshani, 2012, Page 153
11	Food science	Aonla	2010	MAU, Parbhani	Krishidainandini, P. 3
12	Groundnut decorticator	Ground-nut	2005	CIAE, Bhopal	CIAE catalogue
13	Hybrid napier ó phule jaywant	Fodder crop	-	MPKV, Rahuri	Krishidarshani 2011
14	Feeding balance ration to dairy cow	Dairy cow	-	NDRI, Karnal	NDRI, Karnal pub. No. 22/ 2005
15	Mineral supplementation through mineral block / uromol	Buffalo	-	Anand Agril. University, Anand	-
16	Introduction of new breeds of poultry	Giriraj	-	Veterinary University, Banglore.	Recommendation of ICAR, New Delhi.
17	INM	Wheat	2012	MPKV, Rahuri	Krishidarshini, 2012
18	STCR equation	Sorghum	2012	MPKV, Rahuri	Krishidarshini, 2012
19	INM	Maize	2012	MPKV, Rahuri	Krishidarshini, 2012

SWOT analysis

S- Strength, W- Weaknesses, O- Opportunity, T- Threats

Strength:

1. Easily approachable
2. Availability of maximum irrigation potential.
3. Maximum no. of livestock population for milk production.
4. Maximum no. of self-help groups.
5. Village having Krishi Vigyan Mandal.
6. Hot and dry climate condition favourable for horticultural crops.
7. Soil- medium to heavy soil.
8. Village nearest to National Hiway-9.
9. Availability of local market facility.
10. Credit facility for short term and long term loan through DCC and co-operative credit society, nationalize and schedule bank.

Weaknesses:

1. Monoculture cropping pattern of village.
2. Load shading.
3. Imbalanced fertilizer use.
4. Rearing of indigenous breed.
5. Use of local varieties.
6. Lack of storage facilities for agricultural commodities.
7. Lack of scientific knowledge about care and management of livestock.
8. Average literacy in village.
9. Lack of knowledge about regarding maintaining the soil tilth.
10. Less risk bearing ability.

Opportunities:

1. Introducing diversified farming approach.
2. Create awareness about balanced use of fertilizer.
3. Introduction of crossbred animals and upgradation of non-descript animals.
4. Use of high yielding varieties.
5. Scope to develop entrepreneur and agro base industries.

Threats:

1. Ample amount of water is used for irrigation to sugarcane crop so area under horticultural crop is not increasing.
2. Imbalance use of fertilizer led to deteriorate the soil fertility.
3. Unavailability of post-harvest technologies viz. storage facility, cold storage.
4. Discontinuity in electricity.
5. Unassurance of rainfall.

POIN analysis

Sr.No.	Problem	Opportunity	Issues	Needs
1	Lack of Knowledge about scientific technology for dry land agriculture.	Upliftment of dryland technology	Use of local varieties, traditional farming system, no proper tillage operation	Gatcharcha Shivarpheri F.F.S, News Popular articles Radiotalk etc.
2	Unorganized farming community	Formation of cluster approach system and Krishi Vigyan Mandal	Difficulty in adopting scientific technology	Promotion of cluster farming and selecting 10 Krishi Mitra from each village.
3	Poor linkage of farmers with different organization	Scope for increasing the linkages with different organization.	Difficulties in searching resources about farming etc.	Organizing various extension programme and activities create awareness about new linkages.
4	Communication gap among the farmers in adopting new technology	Scope for adopting Gat Charcha and ghongadi baithak for adopting new technology	Limited approach of specific farmers for adopting new technology.	Organizing Kisan Mela, promoting success stories of farmers.
5	Lack of knowledge about marketing channels	Create market rate facility in village	Unawareness about market rate, not bearing the risk ability, unavailability of storage facility.	Inform market rate through mobile SMS and organize training on market management.
6	In Agriculture sector low participation of women in decision making	Increasing participation of women in decision making in agriculture sector and Making them self sufficient	Male dominant society, Less freedom, Less education	Increase the participation of women in decision making process
7	Lack of diversified cropping approach	Introducing multi cropping system	Monoculture cropping pattern	Changing traditional cropping pattern by crop rotation
8	Unemployment in rural youth	Entrepreneurship development	Tendency of youth towards Govt. job	Organizing training about Agriculture Business Management, Developing linkages with Bankers.
9	Low milk yield due to rearing of indigenous breed and technology	Introduction of crossbred through upgradation of non-descript animals	Unawareness about care and management of livestock	Organizing training programme on scientific care and management of livestock
10	Lack of knowledge about processing and value addition of agricultural commodities.	Promoting establishment of small scale industries	Post-Harvest losses in agricultural commodities, lack of storage facility low family income.	Imparting technical knowledge about agricultural processing.

