MPKV/RES/PUB No.212/2017

ICAR

MAHATMA PHULE KRISHI VIDYAPEETH
अन्नं बहु कुर्वित
तद् व्रतम्

AHMEDNAGAR DISTRICT

CONTINGENT CROP PLANNING AND AGRO ADVISORY

EDITORS	
Dr. K. D. Kokate	Dr. S. R. Gadakh
Dr. V. D. Shende	Dr. S. K. Kamble
Dr. R. W. Bharud	Dr. M. B. Dhonde
Dr. S. B. Kharbade	Dr. C. D. Deokar
Dr. Prashant Bodake	Dr. Kalyan Deolankar
Dr. A. D. Kadlag	Dr. S. D. Kale
Dr. D. D. Hajare	Dr. P. B. Kharde
Prof. V. L. Kanawade	Dr. M. P. Deshmukh

2017

STATE : MAHARASHTRA

Agriculture Contingency Plan for District: AHMEDNAGAR

1.0	**District Agriculture profile**				
1.1	**Agro-Climatic/Ecological Zone**				
	Agro Ecological Sub Region (ICAR)	Deccan Plateau, Hot Semi-Arid Eco-Region (6.1)			
	Agro-Climatic Region (Planning Commission)	Western Plateau and Hills Region (IX)			
	Agro Climatic Zone (NARP)	Western Maharastra Scarcity Zone (MH-6)			
	List all the districts or part thereof falling under the NARP Zone	**Scarcity Zone** : Sangli, Nandurbar, Nasik, Dhule, Ahmednagar, Pune			
	Geographic coordinates of district headquarters	Latitude		Longitude	Altitude
		19º04' N		74º45' E	715.3 m
	Name and address of the concerned ZRS/ ZARS/ RARS/ RRS/ RRTTS	ZARS, Krishak Bhavan, Near Dayanand College, Solapur, Pin 413002			
	Mention the KVK located in the district	Krishi Vidyan Kendra, Babhaleshwar (PIRENS) Tal: Rahata, Dist: Ahmednagar			

		Normal RF(mm)	**Normal Rainy days (number)**	**Normal Onset (specify week and month)**	**Normal Cessation (specify week and month)**
1.2	**Rainfall**				
	SW monsoon (June-Sep):	419.0	35	2nd week of June	3rd week of October
	NE Monsoon(Oct-Dec):	111.7	4	-	-
	Winter (Jan- Feb)	8.1	5		
	Summer (March-May)	22.8	-		
	Annual	561.6	44		

1.3	Land use pattern of the district	Geographical urea	Cultivable area	Forest area	Land under non – agriculture use	Permanent pastures	Cultivable wasteland	Land under misc. tree , crops and grooves	Barren and uncultivable land	Current fallows	Other fallows
	Area('000 ha)	1702.0	1146.3	163.4	13.9	41.7	19.1	3.4	131.0	89.4	93.8

(Source: Agricultural Statistical Information, Maharashtra State 2006 (Part II))

1. 4	**Major Soils**	**Area ('000 ha)**
	Shallow red / grey soils	389.4
	Deep black soils	142.7
	Medium deep black soils	63.4

(Source : Strategic research and extension plan of Ahmednagar District)

1.5	**Agricultural land use**	Area ('000 ha)	Cropping intensity (%)	
	Net sown area	1146.3	131.70	
	Area sown more than once	363.4		
	Gross cropped area	1509.7		
1.6	**Irrigation**	**Area ('000 ha)**		
	Net irrigated area	330.0		
	Gross irrigated area	362.0		
	Rainfed area	816.3		
	Sources of Irrigation	Number	Area ('000 ha)	Percentage of total irrigated area
	Canals	2	84.0	25.4
	Tanks	-	-	-
	Open wells	153138	246.0	74.5
	Bore wells	121		-
	Lift irrigation schemes	-	-	-
	Micro-irrigation	-	-	-
	Other sources (please specify)	-	-	-
	Total Irrigated Area	-	330	100
	Pump sets (Diesel + Electrical)	15373	-	-
	No. of Tractors	11645	-	-
	Groundwater availability and use* (Data source: State/Central Ground water Department /Board)	No. of blocks/ Tehsils	(%) area	Quality of water (specify the problem such as high levels of arsenic, fluoride, saline etc)
	Over exploited	-	Good	--
	Critical	5	Good	--
	Semi- critical	1	Good	--
	Safe	8		--
	Wastewater availability and use	-	Salty	--
	Ground water quality	-		

1.7 Area under major field crops & horticulture (2008-09)

Sr. No.	Major field crop	Area ('000 ha)							
		Kharif			*Rabi*			Summer	
		Irrigated	Rainfed	Total	Irrigated	Rainfed	Total	Summer	Grand total
1	*Rabi* Sorghum	-	-	-	-	507.2	507.2	-	507.2
2	Wheat	-	-	-	138.2	-	138.2	-	138.2
3	Sugar cane		-	-	113.7				133.7
4	Pearlmillet	-	128.2	128.2	-	-	-	-	128.2
5	Chickpea	-	-	-	-	--	90.5		90.5
6	Soybean	-	55.5	55.5	-	-	-	-	55.5
	Horticulture crops - Fruits	**Area ('000 ha) Total**							
1	Pomegranate	6.4							
2	Kagzi Lime	6.1							
3	Guava	4.2							
4	Mango	3.5							
5	Sapota	3.1							
	Horticulture crops - Vegetables	Total							
1	Onion	69.978							
2	Tomato	4.173							
3	Brinjal	1.786							
4	Chilli	1.774							

(Source: Strategic Research and Extension Plan of Ahmednagar District)

	Medicinal and Aromatic crops	Data not available
	Plantation crops	Data not available
	Fodder crops	Data not available
	Total fodder crop area	Data not available
	Grazing land	Data not available
	Sericulture etc	Data not available

1.8	Livestock	Male ('000)	Female ('000)	Total ('000)
	Non descriptive Cattle (local low yielding)	333030	293213	626243
	Crossbred cattle	88990	599705	688695
	Non descriptive Buffaloes (local low yielding)	19529	141783	161312
	Graded Buffaloes	4585	33091	37626
	Goat	255577	800190	1055767
	Sheep	67439	327555	394994
	Others (Camel, Pig, Yak etc.)	-	-	-
	Commercial dairy farms (Number)	-	-	-

1.9	Poultry	No. of farms	Total No. of birds ('000)
	Commercial	0	399721
	Backyard	NA	NA

1.10	Fisheries						
	A. Capture						
	i) Marine (Data Source: Fisheries Department)	**No. of fishermen**	**Boats**		**Nets**		**Storage facilities (Ice plants etc.)**
			Mechanized	Non-mechanized	Mechanized (Trawl nets, Gill nets)	Non-mechanized (Shore Seines, Stake & trap nets)	
			NA	NA	NA	NA	NA
	ii) Inland (Data Source: Fisheries Department)	No. Farmer owned ponds		No. of Reservoirs		No. of village tanks	
		-		79		822	
	B. Culture						
		Water Spread Area(ha)		**Yield (t/ha)**		**Production('000 tons)**	
	i) **Brackish water** (Data Source: MPEDA/ Fisheries Department)	NA		NA		NA	
	ii) **Fresh water** (Data Source: Fisheries Department)	13068		0.17		2225	
	Others	-		-		-	

1.11 Production and productivity of major crops (2016-2017)

1.11	Name of crop	*Kharif*		*Rabi*		Summer		Total		Crop residue as fodder (‘000 tons)
		Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)	
Major field crops										
1	Pearlmillet	200.0	800	-		-	-	200.0	800	-
2	Soybean	105.8	1400	-	-	-	-	105.8	1400	-
3	Chickpea			46.2	700	-	-	46.2	700	-
4	*Rabi*	-	-	249.3	500	-	-	249.3	500	-
5	Wheat			255.0	1700	-	-	255.0	1700	-
6	Sugarcane	5985.0	90000	-	-	-	-	5985.0	90000	726
Source : Source: DASO, AhmednagarMajor horticultural crops **Major Horticultural crops**										
1.	Pomegranate	-	-	-	-	-		30.644	4730	-
2.	Kagzi lime	-	-	-	-	-	-	172.836	10990	-
3.	Mango	-	-	-	-	-	-	35.242	2700	-
4.	Sapota	-	-	-	-	-	-	59.962	5900	-
5.	Guava	-	-	-	-	-	-	147.217	30670	-
Major vegetable crops										
1	Onion	-	-	-	-	-	-	740.314	16410	-
2	Tomato	-	-	-	-	-	-	50.526	27640	-
3	Brinjal	-	-	-	-	-	-	24.813	19430	-
4	Chilli	-	-	-	-	-	-	13.488	38540	-
5	Pea	-	-	-	-	-	-	24.120	3970	-
Source: CDAP, Ahmednagar										

1.12	Sowing window for 5 major field crops	Soybean	Pearlmillet	Sugarcane	Wheat	*Rabi* Sorghum	Chickpea
	Kharif- Rainfed	15th June to 15th July	15th June to 15th July		-	-	-
	Kharif -Irrigated	15th July to 25th July	15th June to 15th July	Adsali (15th July to 15th Aug)	-	-	-
	Rabi- Rainfed	-	-		--	15th September to15th October	15th September to 25th September
	Rabi -Irrigated	-	-	Preseasonal(15th Oct to 15th Nov) and suru (15th Dec to 15th Feb)	1st November to 15th November	--	20th October to 10th November

1.13	What is the major contingency the district is prone to?	Regular	Occasional	None
	Drought	--	√	--
	Flood	--	--	√
	Cyclone	--	--	√
	Hail storm	--	--	√
	Heat wave	--	--	√
	Cold wave	--	--	√
	Frost	--	--	√
	Sea water intrusion	--	--	√
	Pests and disease outbreak (specify)	--	√	--
	Others (specify)	--	--	--

1.14	Include Digital maps of the district for		
		Location map of district within State as Annexure I	Enclosed: Yes
		Mean annual rainfall as Annexure 2	Enclosed: No
		Soil map as Annexure 3	Enclosed: Yes

2.0 Strategies for weather related contingencies

2.1 Drought

2.1.1 Rainfed situation

Condition			Suggested contingency measures		
Early season drought (delayed onset)	**Major farming situation**	**Normal crop / cropping system**	**Change in crop / cropping system including variety**	**Agronomic measures**	**Remarks on Implementation**
Delay by 2 weeks June 4th Week	Shallow grey soils	Pearlmillet	• Pearlmillet (Adishakti, Dhanshakti, Shanti) or • Pearlmillet (Adishakti, Dhanshakti) + Pigeonpea (Vipula, Rajeshwari, BDN-708, BDN-711, BSMR-853 / 736) (2:1)	• Basal application of 25 kg K_2O per ha for pearlmillet • Two intercultivations 30 and 45 DAS	Seed source MSSC, NSC and ARS, K. Digraj ARS, Karad MPKV, Rahuri Private co. op Distributors
	Medium deep black soils	Soybean	• Soybean(Phule Agrani, Phule Kalyani, JS-9305, JS-335) • Soybean (Phule Agrani, Phule Kalyani, JS-9305, JS-335) + Pigeonpea(Vipula, Rajeshwari, BDN-708 / 711, BSMR-853 / 736) (3:1) / (6:2)	• Soybean seed treatment with Thiram + Carbendazim 2 g each / kg • Treat pigeonpea seed with trichoderma 5 g per kg of seed	
		Maize	• African tall, Karveer, Rajarshee	• Hoeing at 25 DAS	
		Onion	• Phule Samarth, Baswant -780	• Protective irrigation	
	Deep black soils	Soybean	• Soybean (Phule Agrani, JS-335,) + Pigeonpea (Vipula, BDN-708, BDN-711, BSMR-853) (6:2) intercropping	• As above	
		Onion	• Phule Samarth, Baswant -780		

Condition			Suggested contingency measures		
Early season drought (delayed onset)	**Major farming situation**	**Normal crop / cropping system**	**Change in crop / cropping system including variety**	**Agronomic measures**	**Remarks on Implementation**
Delay by 4weeks July 2nd Week	Shallow grey soils	Pearlmillet	• Pearlmillet (Adishakti, Dhanshakti, Shanti) or + Pigeonpea (Vipula, Rajeshwari, BDN-708 / 711, BSMR-853 / 736) (2:1)	• Basal application of 25 kg K_2O per ha for pearlmillet • Two intercultivations 30 and 45 DAS	Seed source MSSC, NSC and ARS, K. Digraj ARS, Karad MPKV, Rahuri Private co. op Distributors
	Medium deep black soils	Soybean	• Soybean(Phule Agrani, Phule Kalyani, JS-9305, JS-335) • Soybean (Phule Agrani, Phule Kalyani, JS-9305, JS-335), + Pigeonpea(Vipula, Rajeshwari, BDN-708 / 711, BSMR-853 / 736) (3:1) / (6:2)	• Soybean seed treatment with Thiram + Carbendazim 2 g each / kg • Treat pigeonpea seed with trichoderma 5 g per kg of seed	
		Maize	• African tall, Karveer, Rajarshee	• Hoeing at 25 DAS	
		Onion	• Phule Samarth, Baswant -780	• Protective irrigation	
	Deep black soils	Soybean	• Soybean (PhuleAgrani, PhuleKalyani JS-9305, JS-335), + Pigeonpea (Vipula, Rajeshwari, BDN-708 / 711, BSMR-853 /736) (3:1) /(6:2)	• As above	
		Onion	• Phule Samarth, Baswant -780		

Condition	Suggested Contingency measures				
Early season drought (delayed onset)	**Major farming situation**	**Normal crop / Cropping system**	**Change in crop / cropping system including variety**	**Agronomic measures**	**Remarks on Implementation**
Delay by 6 weeks July 4th week	Shallow grey soils	Pearlmillet	• Pearlmillet for fodder (Gaint Bajra)	• One hoeing and weeding before 30 DAS Increase nitrogenous fertilizer (25% dose)	Seed source : MSSC, NSC and ARS, K. Digraj, ARS, Karad, MPKV, Rahuri, Private co. op Distributors
	Medium deep black soils	Soybean	• Sunflower (PhuleRaviraj, MSFH-17/ Bhanu)	• Hoeing at 30 DAS • Opening of conservation furrows in between two rows of sole sunflower for water / moisture	
		Maize	• Maize (fodder -African tall)	• Increase nitrogenous fertilizer (25% dose)	
		Onion	• Onion Rangda (Phule Samarth, Baswant -780) • Fodder Sorghum (PhuleAmruta / Ruchira / Godhan)	• Application of 20 : 20 N:P_2O_5 kg/ha as basal and remaining 20 kg N per ha at 30 DAS with sufficient soil moisture	
	Deep black soils	Soybean	• Sunflower (PhuleRaviraj, MSFH-17/ Bhanu)	• Hoeing at 30 DAS, Sowing on BBF • Opening of conservation furrows in between two rows of sole sunflower for water / moisture	
		Onion	• Onion Rangda (Phule Samarth, Baswant -780) • Fodder Sorghum (PhuleAmruta / PhuleRuchira / PhuleGodhan)	• Application of 20: 20 N:P_2O_5 kg/ha as basal and remaining 20 kg N per ha at 30 DAS with sufficient soil moisture	

Condition			Suggested Contingency measures		
Early season drought (delayed onset)	**Major farming situation**	**Normal crop / cropping system**	**Change in crop / cropping system including variety**	**Agronomic measures**	**Remarks on Implementation**
Delay by 8 weeks August 2nd week	Not Applicable for this district				

Condition			Suggested Contingency measures		
Early season drought (Normal onset)	**Major farming situation**	**Normal crop / cropping system**	**Crop management**	**Soil nutrient & moisture conservation measure**	**Remarks on Implementation**
Normal onset followed by 15-20 days dry spell after sowing leading to poor germination/crop stand etc.	Shallow grey soils	Pearlmillet	• --	• Hoeing at 20 DAS and weeding at 30 DAS	**Seed source :** Central campus MPKV, Rahuri, ARS, Mohol ZARS, Solapur NSC MSSC NRCS, Solapur MAU, Parbhani
	Medium deep black soils	Soybean	• In case of less than 30 % germination take up resowing with wider spacing of 45 cm with sufficient soil moisture.	• Hoeing at 25 DAS	
		Maize	• Gap filling / Resowing	• Hoeing at 25 DAS	
		Onion	• --	• Protective irrigation through sprinkler	
	Deep black soils	Soybean	• In case of less than 30 % germination take up resowing with wider spacing of 45 cm with sufficient soil moisture	• Hoeing at 25 DAS	
		Onion	• --	• Protective irrigation through sprinkler	

Condition			Suggested contingency measures		
Mid season drought (long dry spell, consecutive 2 weeks rainless (>2.5 mm) period)	**Major farming situation**	**Normal crop/ cropping system**	**Crop management**	**Soil nutrient & moisture conservation measure**	**Remarks on Implementation**
At vegetative stage	Shallow grey soils	Pearlmillet	--	Hoeing/Weeding,Use of 8 % kaolin spray	**Seed source :** Central campus MPKV, Rahuri, ARS, Mohol ZARS, Solapur NSC MSSC NRCS, Solapur MAU, Parbhani
	Medium deep black soils	Soybean	Protective irrigation	2 % urea spray, Hoeing and weeding	
		Maize	As above	As above	
		Onion	As above	2% urea spray	
	Deep black soils	Soybean	As above	2 % urea spray, Hoeing and weeding	
		Onion	As above	As above	

Condition			Suggested contingency measures		
Mid season drought (long dry spell)	**Major Farming situation**	**Normal crop/cropping system**	**Crop management**	**Soil nutrient & moisture conservation measures**	**Remarks on Implementation**
At flowering/ fruiting stage	Shallow grey soils	Pearlmillet	Protective irrigation	Use of 8 % kaolin spray	**Seed source :** Central campus MPKV, Rahuri, ARS, Mohol ZARS, Solapur NSC MSSC NRCS, Solapur MAU, Parbhani
	Medium deep black soils	Soybean	Protective irrigation, hoeing, mulching	As above	
		Maize	As above	As above	
		Onion	Protective irrigation	--	
	Deep black soils	Soybean	Protective irrigation	--	
		Onion	Protective irrigation	--	

Condition			Suggested contingency measures		
Terminal drought (Early withdrawal of monsoon)	**Major Farming situation**	**Normal Crop/ cropping system**	**Crop management**	**Rabi Crop planning**	**Remarks on Implementation**
	Shallow grey soils	Pearlmillet	In case of poor grain filling harvest for fodder	No rabi crop	**Seed source :** Central campus MPKV, Rahuri, ARS, Mohol ZARS, Solapur NSC MSSC NRCS, Solapur MAU, Parbhani
	Medium deep black soils	Soybean	Protective irrigation	Chickpea (Vijay, Digvijay,Vikram), Safflower (Phule Kusuma / Chandrabhaga, SSF-708), Sunflower (Phule Bhaskar / Raviraj, MSFH-17	
		Maize	As above	Chickpea (Vijay, Digvijay,Vikram) Safflower (Phule Kusuma / Chandrabhaga, SSF-708) Sunflower (Phule Bhaskar / Raviraj, MSFH-17)	
		Onion	As above	Chickpea (Vijay, Digvijay,Vikram) Safflower (Phule Kusuma / Chandrabhaga, SSF-708) Sunflower (Phule Bhaskar / Raviraj, MSFH-17)	
	Deep black soils	Soybean	As above	Wheat (Tapovan, PhuleSamadhan, Netravati, Panchvati)	
		Onion	As above	Wheat (Tapovan, PhuleSamadhan, Netravati, Panchvati)	

2.1.2 Drought - Irrigated situation

Condition			Suggested contingency measures		
Delayed release of water in canals due to low rainfall	**Major farming situation**	**Normal crop/ cropping system**	**Change in crop/cropping system**	**Agronomic measures**	**Remarks on Implementation**
	Shallow grey soils	*Rabi* Sorghum	• No change	• Phule Anuradha	Seed source : Central campus MPKV, Rahuri, College of Agril., Pune, Kolhapur and Dhule NSC, MSSC,
	Medium deep black soils	Wheat	• No change	• Phule Suchitra	
		Maize	• Wheat (Tapovan, Phule Samadhan, Netravati, Panchvati) • Chickpea (Vijay, Digvijay,Virat, Vikram)	• In wheat - irrigate at critical growth stages • In Gram -use sprinkler for irrigation, Sowing on ridges and furrows	
		Onion	• African tall, Rajshree, Karveer	• Sowing on ridges and furrows	
		Chickpea	• Phule Samarth, N-2-4-1	• Sprinkler irrigation	
	Deep black soils	*Rabi* Sorghum	• No change	• Phule Vasudha, Phule Revati	
		Sugarcane	• No change	• Pressurized/ Drip irrigation	

Condition			Suggested contingency measures		
	Major farming situation	**Normal crop/ cropping system**	**Change in crop/cropping system**	**Major farming situation**	**Normal crop/cropping system**
Limited release of water in canals due to low rainfall	Shallow grey soils	*Rabi* Sorghum	*Rabi* Sorghum	No change	Seed source : Central campus MPKV, Rahuri, College of Agril., Pune, Kolhapur and Dhule NSC, MSSC,
	Medium deep black soils	*Rabi* Sorghum	*Rabi* Sorghum	No change	
		Wheat	Wheat	Wheat (Tapovan, Phule Samadhan, Netravati, Panchvati) Chickpea (Vijay, Digvijay,Virat, Vikram)	
		Maize	Maize	African tall, Rajrshee, Karveer	
			Onion	Phulesamarth, N-2-4-1	
	Deep black soils	Onion	Chickpea	Vijay, Digvijay,Virat,	
		Rabi Sorghum	No change	Phule Vasudha, Phule Revati	

Condition			Suggested contingency measures		
	Major farming situation	Normal crop/ cropping system	Change in crop/cropping system	Major farming situation	Normal crop/ cropping system
Non release of water in canals under delayed onset of monsoon in catchments area	NA				

Condition			Suggested contingency measures		
	Major farming situation	Normal crop/cropping system	Change in crop/ cropping system	Major farming situation	Normal crop/ cropping system
Lack of inflows into tanks due to insufficient /delayed onset of monsoon	Such condition is not available				

Condition			Suggested contingency measures		
	Major farming situation	Normal crop/ cropping system	Change in crop/ cropping system	Major farming situation	Normal crop/ cropping system
Insufficient groundwater recharge due to low rainfall	Shallow grey soils- Open well irrigated	*Rabi* Sorghum	Phule Anuradha	Protective irrigation	
	Medium deep black soils— Open well irrigated	*Rabi* Sorghum	Phule Suchitra	Protective irrigation	
		Wheat	Wheat (Tapovan, Phule Samadhan, Netravati, Panchvati) Chickpea (Vijay, Digvijay,Virat, Vikram))	In wheat - irrigate at critical growth stages In Gram -use sprinkler for irrigation, Sowing on ridges and furrows	
		Onion	No change	Micro Sprinkler irrigation	
		Maize	Maize – Rajrshree, Karveer Chickpea (Vijay, Digvijay, Virat, Vikram)	Sowing on ridges and furrows Sprinkler irrigation	
		Chickpea	Chickpea (Vijay, Digvijay, Virat, Vikram)	Sprinkler irrigation	
	Deep black soils— Open well irrigated	*Rabi* Sorghum	No change	Phule Vasudha, Phule Revati	
		Sugarcane	No change	Pressurized/ Drip irrigation	

2.2 Unusual rains (untimely, unseasonable etc)

Condition	Suggested contingency measure			
Continuous high rainfall in a short span leading to water logging	**Vegetative stage**	**Flowering stage**	**Crop maturity stage**	**Post harvest**
Pearlmillet	Drain out excess water Give second dose of N at optimum soil moisture	Drain out excess water	Harvest at physiological maturity stage	Shift produce to safer place for drying
Soybean	As above	As above	As above	As above
Maize	As above	As above	As above	As above
Onion	As above	As above	As above	As above
Sugarcane	As above	As above	As above	As above
Horticulture				
Grape	Drain out excess water			
Banana	Drain out excess water and staking the plants to prevent lodging			
Pomegranate	Drain out excess water			
Mango	Drain out excess water	Drain out excess water	Harvest at physiological maturity	Cold storage or immediate marketing

Heavy rainfall with high speed winds in a short span	NA

Outbreak of pests and diseases due to unseasonal rains	
Pearlmillet	Insect pest : Shoot fly: Carbofuran 3% CG 1500 50000 , Imidacloprid 70% WS 720 1200 Blister beetle, Heliothis - Dusting of 2 % methyl parathion 20 kg/ ha or Spraying of Chlorpyriphos @ 20 ml / 10 lit. of water
Sorghum	Shoot fly : Carbofuran 3% CG 1500 50000 , Imidacloprid 70% WS 720 1200 Phorate 10% CG 1875, 18750 Stem borer250 8300 , Quinolphos 5% Granules 750 15000 Midge : Dimethoate 30% EC
Soybean	Insect pest : Pod borer: Chlorpyriphos 20 % 2 ml of water Bacillus Thuringinesis var. Kurstaki, Serotype H-39, 3B, Strain Z-52 Spodoptera, Heliothis, Spilosoma, Semilooper,Leaf miner.0.75 kg. 500-750
Sugarcane	Insect pests: Stem Borer: Fipronil 5% SC 1500-2000 500 , Soil application of 10 G Phorate 20 kg/ha or dust 10% Carbaryl 4% @ 50 kg/ha White fly / Mealy bug : Malathion 50 % @ 2 ml / L of water or monocrotophos @ 15 ml / 10 lit of water Top shoot borer: Carbofuran 3% CG 2000 66600 Shoot borer Mealy bug , Pyrilla, Scale InsectStalk borer, Monocrotophos 36% SL 500-1000 White Wooly aphid: Phorate 10G @15 kg/ha, or spray Methyl dematon 25 EC @ 1.5 ml/L or Diamethoate 30% @1.5ml/L Pyrilla- Use of Epiricaniamelanoleuca @ 50,000 eggs per 5000 pupae per ha
Onion	Insect : Thrips : Profenophos @2 ml/ L or Dimethoate 10 ml per 10 lit of water Thrips: Leaf eating cater piller: Lambda cyhalothrin 6 ml or/ Dimethoate 15 ml per 10 lit of water
Grape	Insect: Thrips& Flea beetle : Cyantraniliprole 10.26% OD70 700 1000 5 Emamectin Benzoate 5% SG220 500-1000 Mealy bug: Use sticky traps on trunk and girdle.SprayMalathion 50 EC @ 2 ml / L Verticillumlecani 25 g /10 L of water Mealy bugs:Buprofezin 25% SC@ 15 ml per 10 lit of water 250-375 1000-1500
Pomegranate	Shoot hole borer : 400 g Geru + 2.5 ml Chlorpyriphos (20 EC) + 2.5 g COC mix together in 1 lit water and paste should be applied to branches and stem. Cyantraniliprole 10.26% OD
Mango	Insect: Hoppers: Buprofezin 25% SC, 1-2 ml/liter, Deltramethrin 2.8% EC 0.33to0.5ml/lit Dimethoate 30% EC2475-3300 1500-2000 , Imidacloprid 17.8 SL @ 0.3 ml / L or Spinogad @ 0.3 ml / L water , Lambda – Cyhalothrin 5% EC 05 to 1 ml/ liter of water Malathion 50% EC2250-30001500-2000, Monocrotophos 36% SL 1500-2000, 500-2000 Bug mite, Gall maker, Hopper,Mealy bug, Shoot borer

Outbreak of pests and diseases due to unseasonal rains	
Pearlmillet	Disease: Ergot : Seed treatment with 20% brine solution
Soybean	• Diseases: • Leaf spot: Spray Maconzeb 75 WP 0.25% • Root rot/collar rot- Treat seed with carbendazim + mancozeb (2 g /kg) or PhuleTrichoderma 5 g/kg • Rust – • Early sowing in last week of may • Use of disease resistant variety (DS-228) • Spraying the crop with Propiconazole @ 0.1%
Onion	Disease: Alternaria/ Cercospora : Mancozeb spray 0.25 % or 0.1 %, Carbendazim or 0.25 % chlorothalonil
Horticulture	
Grape	Disease: Powdery mildew : 80 % wettablesulphur @ 2 g / L of water
Pomegranate	Nematodes :Application of Phule Trichoderma 20 kg/ha or Neem cake 200 kg/ha and plantation of Merigold.` Oily spot : when harvesting is done in rainy season spray bromopol 500 ppm. Cut all diseased branches. After cutting spray 0.5 % Capton After new emergence of leaves spray 0.25 % Capton.
Mango	Diseases-Powdery mildew- Spray wettableSulphur 80 WP 0.2 % or dust 300 mesh sulphur @ 20 kg/ha.

2.3 Floods: Not applicable

2.4 Extreme events: Heat wave / Cold wave/Frost/ Hailstorm /Cyclone : Not applicable

2.5 Contingent strategies for Livestock, Poultry & Fisheries : Separate Chapter given (Animal Component for All District)

Annexure-I : Soil Map of Ahmednagar District