

**State: RAJASTHAN**

**Agriculture Contingency Plan for District: JAIPUR**

1.0 District Agriculture profile					
<b>1.1</b>	<b>Agro-Climatic/Ecological Zone</b>				
	Agro Ecological Sub Region (ICAR)		Northern Plain and Central highlands including Aravallis (4.1)		
	Agro-Climatic Zone (Planning Commission)		Western dry region (XIII)		
	Agro Climatic Zone (NARP)		Semi arid eastern plain zone (RJ-5, RJ-3)		
	List all the districts or part thereof falling under the NARP Zone		Jaipur, Ajmer, Tonk & Dausa		
	Geographic coordinates of district headquarters		Latitude	Longitude	Altitude
			26 <sup>o</sup> 25' to 27 <sup>o</sup> 51' N	74 <sup>o</sup> 55'to 76 <sup>o</sup> 10'E	431m MSL
	Name and address of the concerned ZRS/ ZARS/ RARS/ RRS/ RRTTS		Zonal Director Research, Agricultural Research Station, Durgapura, Jaipur - 302018		
	Mention the KVK located in the district		KVK, Takarda (Chomu), Jaipur		
<b>1.2</b>	<b>Rainfall</b>	Normal RF(mm)	Normal Rainy days (number)	Normal Onset ( specify week and month)	Normal Cessation (specify week and month)
	SW monsoon (June-Sep):	514.8	26.6	4th week of June	2 <sup>nd</sup> week of September
	NE Monsoon(Oct-Dec):	15.5	1.2		
	Winter (Jan- Feb)	17.8	2.5	-	-
	Summer (Mar-May)	15.7	1.5	-	-
	Annual	563.8	31.8	-	-

<b>1.3</b>	<b>Land use pattern of the district</b> (latest statistics) 2007-8	Geographical area	Cultivable area	Forest area	Land under non-agricultural use	Permanent pastures	Cultivable wasteland	Land under Misc. tree crops and groves	Barren and uncultivable land	Current fallows	Other fallows
	<b>Area ('000 ha)</b>	1105.5	895.5	81.8	78.6	76.9	35.6	0.82	56.3	63.4	70.6

<b>1.4</b>	<b>Major Soils (common names like red sandy loam deep soils (etc.,))*</b>	<b>Area ('000 ha)</b>	<b>Percent (%) of total</b>
	2. Medium Brown Loamy	652.2	59.2
	1. Deep Brown Loamy	135.9	12.3
	3. Deep Dark Brown Sandy	232.2	21.0
	4. Shallow Red Gravelly Loam	83.1	7.5
	Others (specify):		

<b>1.5</b>	<b>Agricultural land use (2007-8)</b>	<b>Area ('000 ha)</b>	<b>Cropping intensity %</b>
	Net sown area	641.2	140.0
	Area sown more than once	254.2	
	Gross cropped area	895.5	

1.6	<b>Irrigation (2007-8)</b>	Area ('000 ha)		
	Net irrigated area	296.2		
	Gross irrigated area	388.4		
	Rainfed area	507.1		
	<b>Sources of Irrigation</b>	Number	Area ('000 ha)	Percentage of total irrigated area
	Canals		0.8	0.21
	Tanks	-	9	-
	Open wells	201422	157.9	51.9
	Bore wells	186142	137.6	47.9
	Lift irrigation schemes	-	-	-
	Micro-irrigation			
	Other sources (please specify)			
	Total Irrigated Area		296.2	100.0
	Pump sets	25321		
	No. of Tractors	1793		
	<b>Groundwater availability and use* (Data source: State/Central Ground water Department /Board)</b>	No. of blocks/ Tehsils	(%) area	Quality of water (specify the problem such as high levels of arsenic, fluoride, saline etc)
	Over exploited	12		
	Critical	1		
	Semi- critical	0		
Safe	0			
Wastewater availability and use				
Ground water quality				
*over-exploited: groundwater utilization > 100%; critical: 90-100%; semi-critical: 70-90%; safe: <70%				

**1.7 Area under major field crops & horticulture (as per latest figures)**

1.7	S.No.	Major field crops cultivated	Area ('000 ha)							
			Kharif			Rabi			Summer	Grand total
			Irrigated	Rainfed	Total	Irrigated	Rainfed	Total		
1	Pearlmillet	21.8	273.9	295.7	0	0	0	0	295.7	
2	Kharif Pulses	0.0	84.5	84.5	0	0	0	0	84.5	
3	Groundnut	36.2	10.0	46.2	0	0	0	0	46.2	
4	Wheat	0	0	0	136.5	0.3	136.8	0	136.8	
5	Barley	0	0	0	51.3	0.3	51.6	0	51.6	
6.	Gram	0	0	0	6.3	22.3	28.9	0	28.9	
7.	Mustard	0	0	0	81.8	56.1	137.9	0	137.9	

	S.No.	Horticulture crops - Fruits	Area ('000 ha)
			Total
	1	Mango	0.3
	2	Guava	0.0
	3	Ber	0.04
	4	Aonla	0.04
	5	Lime	0.1

	Others (specify)		
		<b>Horticulture crops - Vegetables</b>	<b>Total</b>
1		Tomato	3.1
2		Brinjal	1.9
3		Cucumber	0.06
4		Carrot	0.1
5		Pea	7.5
	Others (specify)	Radish	0.05
		<b>Medicinal and Aromatic crops-NA</b>	-
		<b>Plantation crops- NA</b>	-
	Others (Specify)	Eg., industrial pulpwood crops etc.	-
		<b>Fodder crops</b>	-
		<b>Total fodder crop area</b>	-
		<b>Grazing land</b>	-
		<b>Sericulture etc</b>	-

	<b>Others (specify)</b>	-
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<b>1.8</b>	<b>Livestock</b>	<b>Male ('000)</b>	<b>Female ('000)</b>	<b>Total ('000)</b>			
	Non descriptive Cattle (local low yielding)			397.1			
	Crossbred cattle						
	Non descriptive Buffaloes (local low yielding)			889.4			
	Graded Buffaloes						
	Goat			803.6			
	Sheep			305.4			
	Others (Camel, Pig, Yak etc.)			34.8			
	Commercial dairy farms (Number)						
<b>1.9</b>	<b>Poultry</b>	<b>No. of farms</b>	<b>Total No. of birds ('000)</b>				
	Commercial		341.1				
	Backyard						
<b>1.10</b>	<b>Fisheries (Data source: Chief Planning Officer) NA</b>						
	<b>A. Capture</b>						
	<b>i) Marine</b> (Data Source: Fisheries Department)	<b>No. of fishermen</b>	<b>Boats</b>		<b>Nets</b>		<b>Storage facilities (Ice plants etc.)</b>
			Mechanized	Non-mechanized	Mechanized (Trawl nets, Gill nets)	Non-mechanized (Shore Seines, Stake & trap nets)	
	<b>ii) Inland</b> (Data Source: Fisheries Department)	<b>No. Farmer owned ponds</b>		<b>No. of Reservoirs</b>		<b>No. of village tanks</b>	
<b>B. Culture</b>							

		Water Spread Area (ha)	Yield (t/ha)	Production ('000 tons)
	i) <b>Brackish water</b> (Data Source: MPEDA/ Fisheries Department)			
	ii) <b>Fresh water</b> (Data Source: Fisheries Department)			
	<b>Others</b>			

**1.11 Production and Productivity of major crops** (Average of last 5 years: 2004, 05, 06, 07, 08; specify years)

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)	
<b>Major Field crops (Crops to be identified based on total acreage)</b>										
1	Pearl millet	385.5	1322	-	-	-	-	385.5	1322	
2	Kharif Pulses	36.6	451	-	-	-	-	36.6	451	
3	Groundnut	88.4	1851	-	-	-	-	88.4	1851	
4	Wheat	-	-	392.7	2724	-	-	392.7	2724	
5	Barley	-	-	113.1	2388	-	-	113.1	2388	
Others	Gram	-	-	26.3	824	-	-	26.3	824	
<b>Major Horticultural crops (Crops to be identified based on total acreage)</b>										
1	Tomato							24.0	75893	
2	Brinjal							2.4	12464	
3	Cucumber							0.1	10490	
4	Carrot							0.8	64444	

5	Pea							17.8	23503	
Others	Radish							0.2	39444	

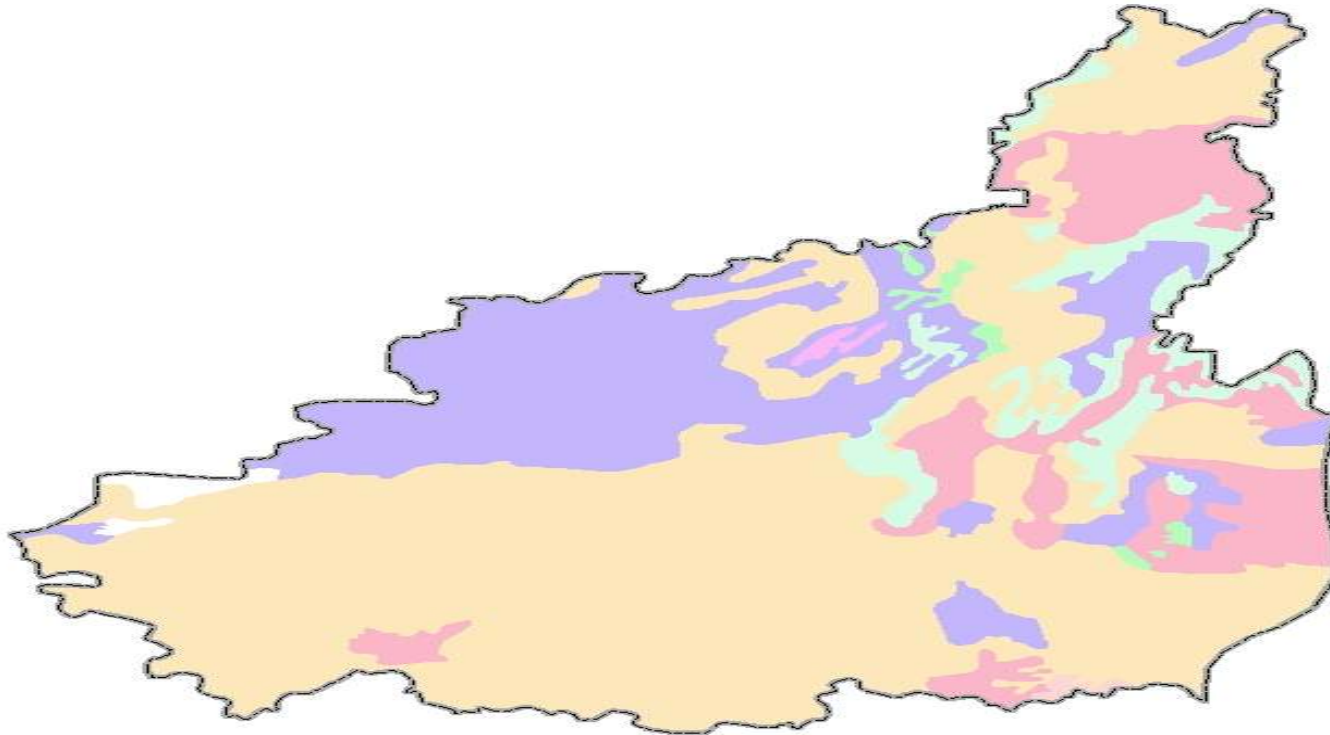
1.12	Sowing window for 5 major field crops (start and end of normal sowing period)	Pearlmillet	Groundnut	Wheat	Barley	Gram
	Kharif- Rainfed	June-July	-	-	-	-
	Kharif-Irrigated	-	June-July	-	-	-
	Rabi- Rainfed	-	-	-	-	October-November
	Rabi-Irrigated	-	-	October-November	October-November	-












1.13	What is the major contingency the district is prone to? (Tick mark)	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 / <b>No</b>
		Mean annual rainfall as Annexure 2	Enclosed: Yes / <b>No</b>
		Soil map as Annexure 3	Enclosed: <b>Yes</b> / No

### Soils of Jaipur district, Rajasthan



#### Legend

-  Deep, black clayey soils
-  Deep, brown loamy soils
-  Deep, dark brown sandy soils
-  Deep, light yellowish brown sandy soils
-  Medium, brown loamy soils
-  Red gravelly loam hilly soils
-  Shallow, red gravelly loam soils
-  Shallow, red loamy soils
-  District boundary

## 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	Deep brown loamy soil (low rainfall)	Pearl millet-Fallow	No change	Use recommended practice of fertilizer application	Seed source 1.NSSC 2.RSSC 3.NSP	
		Cluster bean-Fallow				
		Green gram-Fallow				
		Cowpea -Fallow				
	Deep dark brown sandy soil (medium rainfall)	Sorghum-Mustard				Follow conservation measures like mulch
		Urd bean-Mustard				
		Sesame-Gram				
		Cotton-Wheat				
	Medium brown loamy soil (high rainfall)	Groundnut-Wheat				
		Sorghum-Mustard				
		Urd bean-Mustard				
		Sesame-Gram				
		Cotton-Wheat				
	Groundnut-Wheat					
Condition			Suggested Contingency measures			
Early season drought (delayed onset)	Major Farming situation	Normal Crop/cropping system	Change in crop/cropping system	Agronomic measures	Remarks on Implementation	
Delay by 4 weeks	Deep brown loamy soil (low rainfall)	Pearl millet-Fallow	Green gram-fallow	Uprooting of weeds & using them as mulch	Seed source 1.NSSC 2.RSSC 3.NSP	
		Cluster bean-Fallow	Cowpea-Fallow			
		Green gram-Fallow	Green gram-Fallow	Seed soaking with		

	Deep dark brown sandy soil (medium rainfall)	Sorghum-Mustard	Green gram-Fallow	0.1% thiourea	
		Urd bean -Mustard	Cowpea-Fallow		
		Sesamum-Gram Cotton-Wheat Groundnut wheat	Green gram-Fallow		
	Medium brown loamy soil (high rainfall)	Pearl millet-Fallow	Green gram-Fallow		
		Cluster bean-Fallow	Cowpea-Fallow		
		Green gram-Fallow	No change		
		Cluster bean-Fallow	Cowpea-Fallow		
	Green gram-Fallow	Green gram-Fallow			

Condition	Major Farming situation	Normal Crop/cropping system	Suggested Contingency measures		
			Change in crop/cropping system	Agronomic measures	Remarks on Implementation
Early season drought (delayed onset) Delay by 6 weeks	Deep brown loamy soil (low rainfall)	Pearl millet-Fallow	Green gram-Fallow	Uprooting of weeds & using them as mulch  Seed soaking with 0.1% thiourea	Use short duration of pulses like green gram (RMG-62,RMG-268, RMG-344), Cowpea (RC-19, RC-101)
		Cluster bean-Fallow	Cowpea-Fallow		
		Green gram-Fallow	No change		
		Cowpea -Fallow			
	Deep dark brown sandy soil (medium rainfall)	Sorghum-Mustard	Urd bean-Mustard	Follow conservation measures like mulch	
		Urd bean-Mustard	No change		
		Sesame-Gram	Cowpea-Gram		
		Cotton-Wheat	Urd bean-Fallow		
		Groundnut-Wheat	Urd bean-Fallow		
	Medium brown loamy soil (high rainfall)	Sorghum-Mustard	Urd bean-Mustard		
		Urd bean-Mustard	Urd bean-Mustard		
		Sesame-Gram	Cowpea-Gram		
		Cotton-Wheat	Urd bean-Fallow		

		Groundnut-Wheat	Urd bean-Fallow		
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Condition	Major Farming situation	Normal Crop/cropping system	Suggested Contingency measures		
			Change in crop/cropping system	Agronomic measures	Remarks on Implementation
Early season drought (delayed onset)	Deep brown loamy soil (low rainfall)	Pearl millet-Fallow	Fallow-Mustard	Follow conservation measures like use of bukhar, spray of stress mitigating chemicals like thiourea 500ppm	
		Cluster bean-Fallow	Fallow-Gram		
		Groundnut-fallow	Fallow-gram		
		Cowpea -Fallow	P. millet fodder-Fallow		
	Deep dark brown sandy soil (medium rainfall)	Sorghum-Mustard	Fallow-Mustard	Follow conservation measures like mulch	
		Urd bean-Mustard	Fallow-Mustard		
		Sesame-Gram	Fallow-Gram		
		Cotton-Wheat	Fallow-Mustard		
		Groundnut-Wheat	Fallow-Gram		
	Medium brown loamy soil (high rainfall)	Sorghum-Mustard	Fallow-Mustard		
Urd bean-Mustard		Fallow-Mustard			
Sesame-Gram		Fallow-Gram			
Cotton-Wheat		Fallow-Mustard			
Groundnut-Wheat		Fallow-Gram			

Condition	Major Farming situation	Normal Crop/cropping system	Suggested Contingency measures		
			Crop management	Soil nutrient & moisture conservation measues	Remarks on Implementation
Early season drought (Normal onset)					

<b>Normal onset followed by 15-20 days dry spell after sowing leading to poor germination/crop stand etc.</b>	Deep brown loamy soil (low rainfall)	Pearl millet	Transplanting	Spray of thiourea @ 500 ppm and hoeing & weeding to conserve the moisture	
		Groundnut	Uprooting weeds and using them as mulch		
		Cluster bean			
	Deep dark brown sandy soil (medium rainfall)	Sorghum	Uprooting weeds and using them as mulch		
		Sesamum			
		Groundnut			
		Cotton			
		Pigeon pea			
	Medium brown loamy soil (high rainfall)	Sorghum	Uprooting weeds and using them as mulch		
		Sesamum			
Groundnut					
Cotton					
Pigeon pea					

Condition	Major Farming situation	Normal Crop/cropping system	Suggested Contingency measures		
			Crop management	Soil nutrient & moisture conservation measures	Remarks on Implementation
Mid season drought (long dry spell, consecutive 2 weeks rainless (>2.5 mm) period)					
At vegetative stage	Deep brown loamy soil (low rainfall)	Pearl millet	Removal of alternate rows	Hoeing & weeding to conserve moisture	
		Sorghum			

		Cluster bean			
	Deep dark brown sandy soil (medium rainfall)	Sorghum		Spray of thiourea @ 500 ppm to conserve the moisture	
		Sesamum			
		Pigeon pea			
		Cotton			
	Medium brown loamy soil (high rainfall)	Sorghum			
		Sesamum			
		Pigeon pea			
		Cotton			
<b>Condition</b>			<b>Suggested Contingency measures</b>		
<b>Mid season drought (long dry spell)</b>	<b>Major Farming situation</b>	<b>Normal Crop/cropping system</b>	<b>Crop management</b>	<b>Soil nutrient &amp; moisture conservation measues</b>	<b>Remarks on Implementation</b>
At flowering/ fruiting stage	Deep brown loamy soil (low rainfall)	Pearl millet	Harvest of Kharif crops and using them as fodder	Do not take rabi crops	
		Sorghum			
		Cluster bean			
	Deep dark brown sandy soil (medium rainfall)	Sorghum			
		Sesamum			
		Pigeon pea			

		Cotton			
	Medium brown loamy soil (high rain)	Sorghum			
		Sesamum			
		Pigeon pea			
		Cotton			

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
	Deep brown loamy soil (low rain)	Pearl millet-wheat	Harvest at physiological maturity	Do not take rabi crop	Seed source 1.NSSC 2.RSSC 3.NSP 4.Water harvesting structure can be constructed under MANREGA
		Cluster bean			
		Kharif pulses			
	Deep dark brown sandy soil (medium rain)	Sorghum			
		Sesamum			
		Pigeon pea			
		Cotton			
	Medium brown loamy soil (high rain)	Sorghum			
		Sesamum			
		Pigeon pea			
		Cotton			



**2.1.2 Drought - Irrigated situation**

Condition			Suggested Contingency measures		
	Major Farming situation	Normal Crop/cropping system	Change in crop/cropping system	Agronomic measures	Remarks on Implementation
Delayed release of water in canals due to low rainfall : NA	NA				

Condition			Suggested Contingency measures		
	Major Farming situation	Normal Crop/cropping system	Change in crop/cropping system	Agronomic measures	Remarks on Implementation
Limited release of water in canals due to low rainfall: NA	NA				

Condition			Suggested Contingency measures		
	Major Farming situation	Normal Crop/cropping system	Change in crop/cropping system	Agronomic measures	Remarks on Implementation

Condition	Suggested Contingency measures				
	Major Farming situation	Normal Crop/cropping system	Change in crop/cropping system	Agronomic measures	Remarks on Implementation
Non release of water in canals under delayed onset of monsoon in catchment :NA					

Condition	Suggested Contingency measures				
	Major Farming situation	Normal Crop/cropping system	Change in crop/cropping system	Agronomic measures	Remarks on Implementation
Lack of inflows into tanks due to insufficient /delayed onset of monsoon	Tank bed and River Farming System	Fallow-Mustard	Fallow-Mustard	Use moisture conservation techniques  Limited irrigation	
		Fallow-Gram	Fallow-Gram		
		Fallow-Linseed	Fallow-Linseed		
		Fallow-Mustard-Watermelon	Fallow-Fallow-Watermelon		
		Fallow-Mustard-Muskmelon	Fallow-Fallow-Muskmelon		
		Fallow-Gram-Cucurbits	Fallow-Fallow-Cucurbits		

Condition	Suggested Contingency measures				
	Major Farming situation	Normal Crop/cropping system	Change in crop/cropping system	Agronomic measures	Remarks on Implementation
Insufficient groundwater recharge due to low rainfall	Irrigated Coarse textured soils	Pearlmillet-Wheat	Greengram-Mustard	Use recommended practices for fertilizer and weed control	Irrigated Coarse textured soils
		Groundnut-Wheat	Cowpea-Mustard		
		Clusterbean-Barley	Clusterbean-Gram		
	Irrigated Medium textured soils	Cotton-Wheat	Pearlmillet-Barley		
		Groundnut-Wheat	Greengram-Mustard		
		Sorghum-Mustard	Urdbean-Mustard		
Any other condition	Brackish Irrigation	Fallow-Barley	Fallow-Barley	Seed treatment with	Brackish

Condition (specify)	Suggested Contingency measures				
	Major Farming situation	Normal Crop/cropping system	Change in crop/cropping system	Agronomic measures	Remarks on Implementation
	water areas	Fallow-Wheat	Fallow-Fallow	0.1% Nacl	Irrigation water areas

## 2.2 Unusual rains (untimely, unseasonal etc) (for both rainfed and irrigated situations)

Condition	Suggested contingency measure							
	Vegetative stage	Flowering stage	Crop maturity stage	Post harvest				
Continuous high rainfall in a short span leading to water logging	Removal of Excess water	Removal of Excess water	Removal of Excess water					
Pearlmillet								
Groundnut								
Sorghum								
Kharif Pulses								
Maize								
<b>Horticulture</b>								
Tomato								
Brinjal								
Pea								
Carrot								
Radish								
Heavy rainfall with high speed winds in a short span								
Outbreak of pests and diseases due to unseasonal rains								

## 2.3 Floods: NA

Condition	Suggested contingency measure			
	Seedling / nursery stage	Vegetative stage	Reproductive stage	At harvest
Transient water logging/ partial inundation				

<b>Continuous submergence for more than 2 days</b>				
<b>Sea water intrusion</b>				

#### 2.4 Extreme events: Heat wave / Cold wave/Frost/ Hailstorm /Cyclone

Extreme event type	Suggested contingency measure			
	Seedling / nursery stage	Vegetative stage	Reproductive stage	At harvest
<b>Heat Wave</b>				
Wheat	-	-	Frequent irrigation & spray of Thiourea @500 ppm	
Barley				
Gram				
<b>Horticulture</b>				
Tomato	-	-	Frequent irrigation	Tomato
Brinjal	-	-		Brinjal
Pea	-	-		Pea
<b>Cold wave</b>				
Mustard	-	Light irrigation, Spray of 0.1 % H <sub>2</sub> SO <sub>4</sub>	Light irrigation, Spray of 0.1 % H <sub>2</sub> SO <sub>4</sub>	
Pea				
Gram				
Wheat				
Barley				
<b>Horticulture</b>				
Tomato		Light irrigation, Spray of 0.1 % H <sub>2</sub> SO <sub>4</sub>	Light irrigation, Spray of 0.1 % H <sub>2</sub> SO <sub>4</sub>	
Brinjal				

Pea				
<b>Frost</b>				
Mustard	-	Light irrigation, Spray of 0.1 % H <sub>2</sub> SO <sub>4</sub>	Light irrigation, Spray of 0.1 % H <sub>2</sub> SO <sub>4</sub>	
Pea				
Gram				
Wheat				
Barley				
<b>Horticulture</b>				
Tomato		Light irrigation, Spray of 0.1 % H <sub>2</sub> SO <sub>4</sub>	Light irrigation, Spray of 0.1 % H <sub>2</sub> SO <sub>4</sub>	Tomato
Brinjal				Brinjal
Pea				Pea
<b>Hailstorm</b>				

## 2.5 Contingent strategies for Livestock, Poultry & Fisheries

### 2.5.1 Livestock

	Suggested contingency measures		
	Before the event	During the event	After the event
<b>Drought</b>			
Feed and fodder availability	Provide Enough feed & fodder	Provide sufficient feed & fodder along with mineral mixture	Provide sufficient feed & fodder along with mineral mixture
Drinking water	Enough water for drinking	Provide sufficient water along with mineral mixture	Provide sufficient water along with mineral mixture

Health and disease management		Vaccinate against contagious diseases	Vaccinate against contagious diseases
<b>Floods</b>			
Feed and fodder availability	Provide Enough feed & fodder	Provide dry fodder and feed in sufficient amount	Provide dry fodder and feed in sufficient amount
Drinking water		Provide safe drinking water	Provide safe drinking water
Health and disease management			
<b>Cyclone</b>			
Feed and fodder availability			
Drinking water			
Health and disease management			
<b>Heat wave and cold wave</b>			
Shelter/environment management	Normal condition	Cover the shelter from north side/west side and use heaters/coolers	Normal condition
Health and disease management	Normal condition	Vaccinate against diseases	Normal condition

## 2.5.2 Poultry

	Suggested contingency measures			Convergence/linkages with ongoing programs, if any
	Before the event	During the event	After the event	
<b>Drought</b>				
Shortage of feed ingredients	Provide Enough feed	Provide sufficient feed along with mineral mixture	Provide sufficient feed along with mineral mixture	Provide Enough feed
Drinking water	Enough water for drinking	Provide sufficient water along with mineral mixture	Provide sufficient water along with mineral mixture	Enough water for drinking
Health and disease management		Vaccinate against contagious diseases	Vaccinate against contagious diseases	
<b>Floods</b>				
Shortage of feed ingredients	Provide Enough feed & fodder	Provide dry fodder and feed in sufficient amount	Provide dry fodder and feed in sufficient amount	Provide Enough feed & fodder
Drinking water		Provide safe drinking water	Provide safe drinking water	
Health and disease management				
<b>Cyclone</b>				
Shortage of feed ingredients				
Drinking water				
Health and disease management				

<b>Heat wave and cold wave</b>				
Shelter/environment management	Normal condition	Cover the shelter from north side/west side and use heaters/coolers	Normal condition	Normal condition
Health and disease management	Normal condition	Vaccinate against diseases	Normal condition	Normal condition

**2.5.3 Fisheries/ Aquaculture: NA**