State: RAJASTHAN

Agriculture Contingency Plan of District: JHUNJHUNU

1.0 District Agriculture Profile				
1.1	**Agro-Climatic/Ecological Zone**			
	Agro Ecological Sub Region (ICAR)	Western Plain, Kachchh And Part Of Kathiawar (2.3)		
	Agro-Climatic Region (Planning Commission)	Western Dry Region (XIV)		
	Agro climatic zone (NARP)*	Transitional plain of inland drainage zone (RJ-3)		
	List all the districts falling under the NARP zone	Sikar, Jhunjhunu, Nagaur and parts of Churu.		
	Geographic coordinates of district	Latitude	Longitude	Altitude
		27° 51' 0" N	75° 16' 12" E	323 m
	Name and address of the concerned ZRS/ZARS/RARS/RRS/RRTTS	Agriculture Research Station Fatehpur-Shekhawati, Distt.:Sikar (Raj.) 332301		
	Mention the KVK located in the district	One (Abusar , Jhunjhunu)		
1.2	Rainfall	Average(mm)	Normal onset	Normal cessation
	SW monsoon (June-sep.)	444.5	Last week of June	Last week of September
	NE monsoon (oct.-dec.)	-	-	-
	Winter (Jan-March)	-		
	Summer (Apr-may)	-		
	Annual	444.5		

1.3	Land use Pattern of the distt.	Geographical area	Forest area	Land under non agriculture use	Parmanent Past.	Cultivable wasteland	Land under misc.tree crops &groves	Barren&uncultivable land	Current fallows
	Area('000 ha)	591	39.6	22	39	6.9	0.05	15.2	18.7

1.4	Major soils	Area(000 ha)	Percent(%) of total
	Medium to fine textured soil	355.7	60.19
	Medium to heavy textured soil	165.2	27.95
	Medium textured soil	70.1	11.86
	Others (specify)		
1.5	**Agriculture land use**	Area(000 ha)	Cropping intensity %
	Net sown area	423	156
	Area sown more than once	241	
	Gross sown area	664	
1.6	**Irrigation**	Area(000 ha)	
	Net irrigated area	223	
	Gross cultivated area	664	
	Gross irrigated area	232	

	Rainfed area	427		
	Sources of irrigation	Number	Area(000 ha)	% area
	Canals	-	-	-
	Tanks	-	-	-
	Open wells & Bore well	2032411	232	100
	Lift irrigation	-	-	-
	Other sources	-	-	-
	Total	-	232	100
	Pump sets	48014	-	-
	Micro irrigation	-	-	-
	Groundwater availability and use	No. of blocks	% area	Quality of water
	Over exploited	7	-	Good
	Critical	-	-	-
	Semi-critical	-	-	-
	Safe	1	-	Poor
	Wastewater availability and use	-	-	_

- Over-exploited: groundwater utilization>100%; critical: 90-100%; Semi-critical: 70-90%; safe:<70%

1.7 Area under major field crops & horticulture etc.

S.No.	Field crops	Total area (000ha)	Irrigated	Rainfed
	Bajra	267	82	185
	Clusterbean	66	-	66
	Cowpea	31	-	31
	Moong	25	-	25
	Mothbean	4	-	4
	Gram	88	88	
	Wheat	64	64	-
	Mustard	35	35	-
	Barley	8	8	-
	Horticulture crops-Fruits	Area('000 ha)		
	Aonla	0.02		
	Ber	0.05		
	Beel	0.2		
	Anar	0.1		
	Horticulture crops-Vegetables	Area('000 ha)		
	Cabbage	0.03		

	Cauliflower	0.1
	Bringal	0.04
	Tomato	0.02
	Chilli	0.04
	Onion	0.2
	Medicinal & Aromatic crops	
	Aloevera	-
	Rose	-
	Genda	0.01
	Plantation crops	
	Jojoba	0.004
	Castor	-
	Fodder crops	
	Lucerne	0.3
	Bajra	-
	Barley	-
	Total fodder crop area	0.3

1.8	**Livestock**	**Number('000)**

	Cattle	123		
	Buffaloes total	379		
	Goat	490		
	Sheep	163		
	Others(camel, pig, Yak etc.)	34		
1.9	**Poultry**			
	Commercial	268 (No.)		
	Backyard	-		
1.10	**Inland fisheries**	**Area(ha)**	**Yield(t/ha)**	**Production (tonnes)**
	Brackish water	-		
	Fresh water	-		
	Others	-		

1.11	**Production & Productivity of major crops**	**Kharif**		**Rabi**		**Summer**		**Total**	
		Production (000 t)	Productivity (Kg/ha)	Production (000 t)	Productivity (Kg/ha)	Production (000 t)	Productivity (Kg/ha)	Production (000 t)	Productivity (Kg/ha)
	Pearl millet	219	820	-	-	-	--	219	820
	Clusterbean	19	295	-	-	-	-	19	295

	Cowpea	4	133	-	-	-	-	4	133
	Mungbean	4.7	188	-	-	-	-	4.7	188
	Mothbean	0.5	133	-	-	-	-	0.5	133
	Wheat	-	-	192	3000	-	-	192	3000
	Barley	-	-	21.8	2733	-	-	21.8	2733
	Mustard	-	-	47.3	1350	-	-	47.3	1350
	Gram	-	-	64.5	733	-	-	64.5	733
	Major horticultue crops								
	Cabbage	-	-	0.180	6000	-	-	0.180	6000
	Cauliflower	-	-	1.60	20000	-	-	1.60	20000
	Chilli	-	-	0.321	3100	-	-	0.321	3100
	Onion	-	-	3.685	12500	-	-	3.685	12500

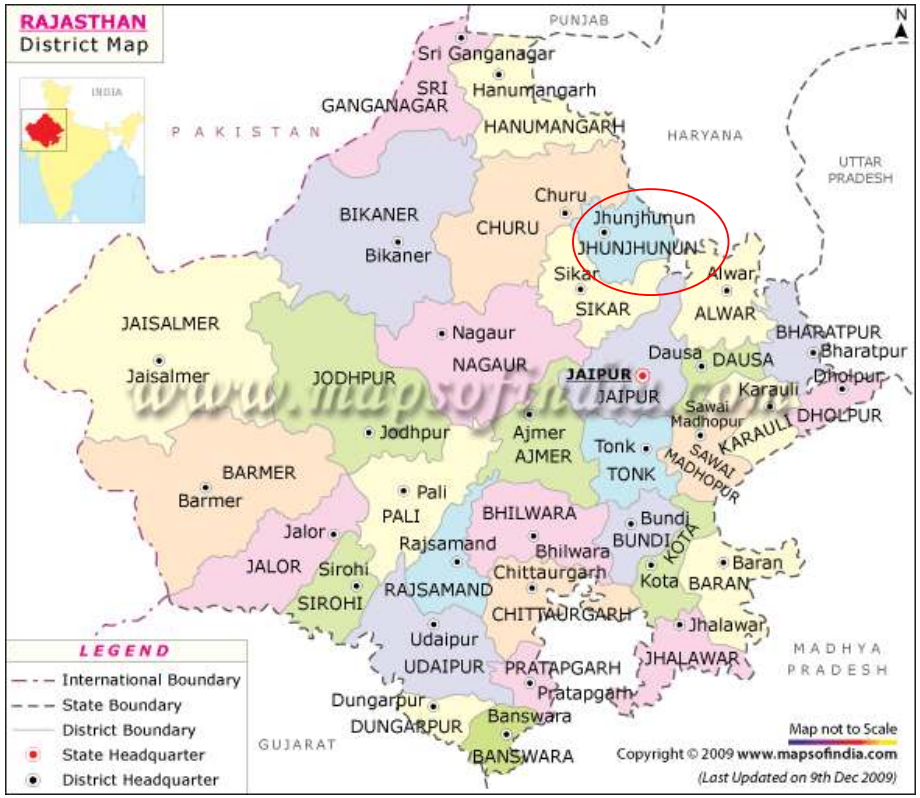
1.12	**Sowing window for 5 major crops(start and end of sowing period)**	**Pearl millet**	**Clusterbean**	**Cowpea**	**Mungbean**	**Mothbean**
	Kharif-Rainfed	Ist week June to Ist week July	Last week June to Last week July	Ist week July to 3rd week July	Ist week July to 3rd week July	I week July to Ist week August
	Kharif-Irrigated	2nd June to Ist week	Ist week of July-2nd	-	-	-

		July	week July			
	Crop	Wheat	Barley	Mustard	Gram	Fenugreek
	Rabi-Irrigated	2nd week to 4th week November	1st week to 2 nd week November.	2nd week to 4th week October.	2nd week to 4th week October.	1st week to 2 nd week November.

1.13	**What is the major contingency the district is Prone to? (tick Yes/No)**	Regular	Occasional	None
	Drought	√	Aug. √	-
	Flood	-	-	
	Cyclone	-	-	-
	Hail storm	-	-	-
	Heat wave	√	(sept. & march) √	-
	Cold wave	√	(Jan- & Feb.) √	-
	Frost	√	(Jan- & Feb.) √	-
	Sea water inundation	-	-	-
	Pests and diseases (specify)	Jassid & Whitefly,Pod borer	Aug.,Feb.,March √	-

1.14	**Include Digital Maps of the District for**	Location map of district with in state as Annexure 1	Enclosed: Yes
		Mean annual rainfall as Annexure 2	Enclosed: Yes
		Soil map as Annexure 3	Enclosed : Yes

Annexure 1: Location map of Jhunjhunu

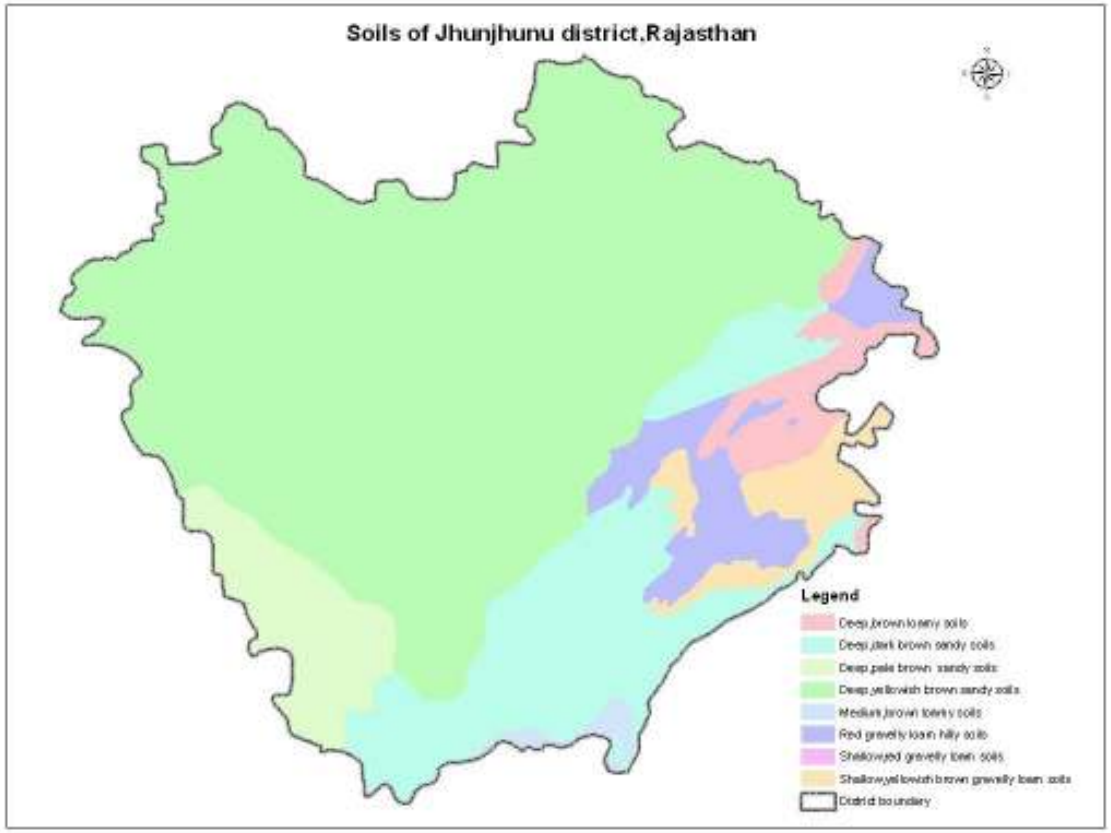


Annexure 2: Rainfall data

District-Jhunjhunu

Year	Rainfall (mm)
1994	453.0
1995	720.0
1996	815.0
1997	672.0
1998	511.0
1999	302.0
2000	336.0
2001	490.4
2002	169.3
2003	525.1
2004	351.0
2005	519.5
2006	425.4
2007	484.9
2008	652.5

Annexure 3: Soil map



2.0 Strategies of weather related contingencies

2.1 Drought

2.1.1-Rainfed Situation

Condition	Suggested Contingency measures				
Early season drought delayed onset	Major farming situation	Crop /cropping system	Change in crop/cropping system	Agronomic measures	Remarks on implementation
Delayed by 2 week (2nd wk July)	1. Rainfed Deep yellowish brown sandy soil (high rainfall area)	Pearl millet	No Change Prefer varieties-HHB-67,RHB-121,RHB-30	1.Seed treatment with thiourea @1000ppm 2.Basal dose of RDF 3. Wider row spacing(60 cm.) and making ridge and furrow after 30 DAS. 4.Soil/Straw mulch after 15 -20 DAS 5. Weed free field.	Seed source 1.NSSC 2.RSSC 3.NSP
		Clusterbean	No Change Prefer varieties RGC-936,RGC-1003,RGC-1017	1.Seed treatment with thiourea @500ppm 2.Basal dose of RDF 3. Weed free field.	-do-
		Cowpea	No Change	1.Basal dose of RDF	-do-

			Prefer varieties RC-101,RC-19	2. Weed free field and dust mulching.	
		Moong	No Change Prefer varieties RMG-62,RMG-268	1.Basal dose of RDF 2. Weed free field and dust mulching.	-do-
		Mothbean	No Change Prefer varieties RMO-40,RMO-435	1.Seed treatment with thiourea @500ppm 2.Basal dose of RDF 3. Weed free field and dust mulching.	-do-
	2. Rainfed Deep dark brown sandy soil (Low rainfall area)	Pearl millet	No Change Prefer varieties-HHB-67,RHB-121,RHB-30	1.Seed treatment with thiourea @1000ppm 2.Basal dose of RDF 3. Wider row spacing(60 cm.) and making ridge and furrow after 30 DAS. 4.Soil/Straw mulch after 15 -20 DAS 5. Weed free field.	Seed source 1.NSSC 2.RSSC 3.NSP
		Clusterbean	No Change Prefer varieties RGC-936,RGC-1003,RGC-1017	1.Seed treatment with thiourea @500ppm 2.Basal dose of RDF 3. Weed free field.	-do-

		Cowpea	No Change Prefer varieties RC-101,RC-19	1.Basal dose of RDF 2. Weed free field and dust mulching.	-do-
		Moong	No Change Prefer varieties RMG-62,RMG-268	-do-	-do-
		Mothbean	No Change Prefer varieties RMO-40,RMO-435	1.Seed treatment with thiourea @500ppm 2.Basal dose of RDF 3. Weed free field and dust mulching.	-do-
	3. Rainfed Other soils	Pearl millet	No Change Prefer varieties-HHB-67,RHB-121,RHB-30	1.Seed treatment with thiourea @1000ppm 2.Basal dose of RDF 3. Wider row spacing(60 cm.) and making ridge and furrow after 30 DAS. 4.Soil/Straw mulch after 15 -20 DAS 5. Weed free field.	Seed source 1.NSSC 2.RSSC 3.NSP
		Clusterbean	No Change Prefer varieties RGC-936,RGC-1003,RGC-1017	-do-	-do-
		Cowpea	No Change	-do-	-do-

			Prefer varieties RC-101,RC-19		
		Moong	No Change Prefer varieties RMG-62,RMG-268	-do-	-do-
		Mothbean	No Change Prefer varieties RMO-40,RMO-435	-do-	-do-

Condition	Suggested Contingency measures				
Early season drought delayed onset	Major farming situation	Crop /cropping system	Change in crop/cropping system	Agronomic measures	Remarks on implementation
Delayed by 4 week (4th wk July)	1. Deep yellowish brown sandy soil (high rainfall area)	Pearl millet	Prefer Varieties-HHB-67,HHB-60 or Replace with clusterbean variety RGC-936 or Cowpea variety RC-101 or Mothbean Variety RMO-40,RMo-435	1.Seed treatment with thiourea @1000ppm in pearlmillet and @ 500ppm in moth and clusterbean 2.Basal dose of RDF including FYM 3.Soil/Straw mulch after 15 -20 DAS 4. Weed free field.	Seed source 1.NSSC 2.RSSC 3.NSP
		Clusterbean	RGC-936	1.Seed treatment with thiourea @500ppm 2.Basal dose of RDF	-do-

				3. Weed free field.	
		Cowpea	RC-101	1.Basal dose of RDF 2. Weed free field and dust mulching.	-do-
		Moong	Prefer Varieties like RMG-62, RMG-268	-do-	-do-
		Mothbean	Prefer Varieties RMO-40, RMO-435,	1.Seed treatment with thiourea @500ppm 2.Basal dose of RDF 3. Weed free field and dust mulching.	-do-
	2. Deep dark brown sandy soil (Low rainfall area)	Pearl millet	Varieties-HHB-67,HHB-60 or Replace with clusterbean variety RGC-936 or Cowpea variety RC-101 or Mothbean Variety RMO-40,RMO-435	1.Seed treatment with thiourea @1000ppm in pearlmillet and @ 500ppm in moth and clusterbean 2.Basal dose of RDF including FYM 3.Soil/Straw mulch after 15 -20 DAS 4.Weed free field.	Seed source 1.NSSC 2.RSSC 3.NSP
		Clusterbean	RGC-936,	1.Seed treatment with thiourea @500ppm 2.Basal dose of RDF 3.Weed free field.	-do-
		Cowpea	RC-101	1.Basal dose of RDF	-do-

				2.Weed free field and dust mulching.	
		Moong	Prefer Varieties RMG-62, RMG-268	-do-	-do-
		Mothbean	RMO-40, RMO-435,	1.Seed treatment with thiourea @500ppm 2.Basal dose of RDF 3. Weed free field and dust mulching.	-do-
	3. Rainfed other soils	Pearl millet	Prefer Varieties -HHB-67,HHB-60 or Replace with clusterbean variety RGC-936 or Cowpea variety RC-101 or Mothbean Variety RMO-40,RMO-435	-do-	Source 1.NSSC 2.RSSC 3.NSP
		Clusterbean	RGC-936,	-do-	-do-
		Cowpea	RC-101	-do-	-do-
		Moong	RMG-62, RMG-268	-do-	-do-
		Mothbean	RMO-40, RMO-435,	-do-	-do-

Condition	Suggested Contingency measures				
Early season drought delayed onset	Major farming situation	Crop /cropping system	Change in crop/cropping system	Agronomic measures	Remarks on implementation
Delayed by 6 week (2^{nd} wk August)	Deep yellowish brown sandy soil (high rainfall area)	Pearl millet	Replace with clusterbean variety RGC-936 or Mothbean Variety RMO-40,RMO-435 or Green fodder pearlmillet(Raj-171) and cowpea (RCP-27) mixed cropping	1.Seed treatment with thiourea @ 500ppm in moth and clusterbean 2.Basal dose of RDF including FYM 3.Weed free field.	Seed source 1.NSSC 2.RSSC 3.NSP
		Clusterbean	RGC-936,	1.Seed treatment with thiourea @500ppm 2.Basal dose of RDF 3.Weed free field dust mulching	-do-
		Cowpea	Replace with clusterbean (Variety RGC-936) or mothbean(RMO-40,RMO-435)	-do-	-do-
		Moong	Replace with clusterbean (Variety RGC-936) or mothbean(RMO-40,RMO-435	-do-	-do-
		Mothbean	Prefer varieties like RMO-40,RMO-435	-do-	-do-
	Deep dark brown sandy soil (Low	Pearl millet	Replace with clusterbean variety RGC-936 or Mothbean Variety RMO-	1.Seed treatment with thiourea @ 500ppm in moth and clusterbean	Seed source 1.NSSC 2.RSSC

	rainfall area)		40,Rmo-435 or Green fodder pearlmillet(Raj-171) and cowpea(RCp-27) mixed cropping	2.Basal dose of RDF including FYM 3.Weed free field.	3.NSP
		Clusterbean	RGC-936,	1.Seed treatment with thiourea @500ppm 2.Basal dose of RDF 3.Weed free field.	-do-
		Cowpea	RC-101	1.Basal dose of RDF 2.Weed free field and dust mulching.	-do-
		Moong	Prefer varieties like RMG-62, RMG-268	1.Basal dose of RDF 2.Weed free field and dust mulching.	-do-
		Mothbean	Prefer varieties like RMO-40, RMO-435,	1.Seed treatment with thiourea @500ppm 2.Basal dose of RDF 3 .Weed free field and dust mulching.	-do-
]	3. Rainfed Other soils	Pearl millet	Replace with clusterbean variety RGC-936 or Mothbean Variety RMO-40,RMO-435 or Green fodder pearlmillet(Raj-171) and cowpea(RCp-27) mixed cropping	-do-	Seed source 1.NSSC 2.RSSC 3.NSP
		Clusterbean	RGC-936,	-do-	-do-
		Cowpea	RC-101	-do-	-do-

		Moong	Prefer varieties like RMG-62, RMG-268	-do-	-do-
		Mothbean	Prefer varieties like RMO-40, RMO-435,	-do-	-do-

Condition	Suggested Contingency measures				
Early season drought delayed onset	Major farming situation	Crop /cropping system	Change in crop/cropping system	Agronomic measures	Remarks on implementation
Delayed by 8 week (4th wk August)	1. Deep yellowish brown sandy soil (high rainfall area)	Pearl millet	Replace with Mothbean Variety RMO-40 or conserve moisture for Rabi crop	1.Seed treatment with thiourea @ 500ppm in moth bean 2.Basal dose of RDF 3. Weed free field.	Seed source 1.NSSC 2.RSSC 3.NSP
		Clusterbean	-do-	-do-	-do-
		Cowpea	-do-	-do-	-do-
		Moong	-do-	-do-	-do-
		Mothbean	-do-	-do-	-do-
	2. Deep dark brown sandy soil (Low	Pearl millet	-do-	-do-	-do-

	rainfall area)	Clusterbean	-do-	-do-	-do-
		Cowpea	-do-	-do-	-do-
		Moong	-do-	-do-	-do-
		Mothbean	-do-	-do-	-do-
		Pearl millet	-do-	-do-	-do-
		Clusterbean	-do-	-do-	-do-
		Cowpea	-do-	-do-	-do-
		Moong	-do-	-do-	-do-
		Mothbean	-do-	-do-	-do-

Condition	Suggested Contingency measures				
Terminal drought	Major farming situation	Crop /cropping system	Crop management	Rabi crop planning	Remarks on implementation
Terminal drought	1. Deep yellowish brown sandy soil (high rainfall area)	Pearl millet	Harvesting	Conserve soil moisture	-do-
		Clusterbean	-do-	-do-	-do-
		Cowpea	-do-	-do-	-do-
		Moong	-do-	-do-	-do-
		Mothbean	-do-	-do-	-do-

	2. Deep dark brown sandy soil (Low rainfall area)	Pearl millet	-do-	-do-	-do-
		Clusterbean	-do-	-do-	-do-
		Cowpea	-do-	-do-	-do-
		Moong	-do-	-do-	-do-
		Mothbean	-do-	-do-	-do-
	3. Rainfed other soils	Pearl millet	-do-	-do-	-do-
		Clusterbean	-do-	-do-	-do-
		Cowpea	-do-	-do-	-do-
		Moong	-do-	-do-	-do-
		Mothbean	-do-	-do-	-do-

Condition	Suggested Contingency measures				
Early season drought (Normal onset)	Major farming situation	Crop /cropping system	Crop management	Soil nutrient and moisture conservation measures	Remarks on implementation
Normal onset followed by 15-20 days dry spell after sowing leading to poor germination/crop stand etc.	1. Deep yellowish brown sandy soil (high rainfall area)	Pearl millet	Resowing or Gap filling	1.Dust or straw mulching 2.No need to apply basal dose	Seed source 1.NSSC 2.RSSC 3.NSP 4.Water harvesting structure can be constructed under MANREGA

		Clusterbean	Resowing	No need to apply basal dose in resowing if already applied	-do-
		-do-	-do-	-do-	-do-
		-do-	-do-	-do-	-do-
		-do-	-do-	-do-	-do-
	2. Deep dark brown sandy soil (Low rainfall area)	Pearl millet	Resowing or Gap filling	1.Dust or straw mulching 2.No need to apply basal dose	-do-
		Clusterbean	Resowing	No need to apply basal dose in resowing if already applied	-do-
		Cowpea	-do-	-do-	-do-
		Moong	-do-	-do-	-do-
		Mothbean	-do-	-do-	-do-
	3. Rainfed Other soils	Pearl millet	Resowing or Gap filling	1.Dust or straw mulching 2.No need to apply basal dose	-do-
		Clusterbean			
		Cowpea			
		Moong			
		Mothbean			

Condition	Suggested Contingency measures				
Mid season drought (Long dry spell, Consecutive two weeks	Major farming situation	Crop /cropping system	Crop management	Soil nutrient and moisture conservation measures	Remarks on implementation

rainless(>2.5mm period))					
At vegetative stage	1. Deep yellowish brown sandy soil (high rainfall area)	Pearl millet	1.Weed free 2. Life saving irrigation if available 3.Remove alternate row 4.Ridge and furrow making 5.Spray of thiourea @ 0.1%	1.Hoeing and weeding	Seed source 1.NSSC 2.RSSC 3.NSP 4.Water harvesting structure can be constructed under MANREGA
		Clusterbean	1.Weed free 2. Life saving irrigation if available 3.Spray of thiourea @ 0.05%	-do-	-do-
		Cowpea	1.Weed free 2. Life saving irrigation if available	-do-	-do-
		Moong	-do-	-do-	-do-
		Mothbean	Weed free	-do-	-do-
	2. Deep dark brown sandy soil (Low rainfall area)	Pearl millet	1. Weed free 2. Life saving irrigation if available 3.Remove alternate row 4.Ridge and furrow making 5.Spray of thiourea @ 0.1%	-do-	Seed source 1.NSSC 2.RSSC 3.NSP 4.Water harvesting structure can be constructed under MANREGA

		Clusterbean	1.Weed free 2. Life saving irrigation if available 3.Spray of thiourea @ 0.05%	1.Hoeing and weeding	-do-
		Cowpea	1.Weed free 2. Life saving irrigation if available	1.Hoeing and weeding	-do-
		Moong	-do-	-do-	-do-
		Mothbean	1.Weed free	1.Hoeing and weeding	-do-
	3. Rainfed Other soils	Pearl millet Clusterbean Cowpea Moong Mothbean	1.Weed free 2. Life saving irrigation if available 3.Remove alternate row 4.Ridge and furrow making 5.Spray of thiourea @ 0.1%	1.Hoeing and weeding	Seed source 1.NSSC 2.RSSC 3.NSP 4.Water harvesting structure can be constructed under MANREGA

Condition	Suggested Contingency measures				
Mid season drought (Long dry spell)	Major farming situation	Crop /cropping system	Crop management	Soil nutrient and moisture conservation measures	Remarks on implementation

At reproductive stage	1. Deep yellowish brown sandy soil (high rainfall area)	Pearl millet	1.Life saving irrigation if available 2.Thiourea spray @ 0.1%		Seed source 1.NSSC 2.RSSC 3.NSP 4.Water harvesting structure can be constructed under MANREGA
		Clusterbean	-do-		-do-
		Cowpea	Life saving irrigation if available		-do-
		Moong	-do-		-do-
		Mothbean	-do-		-do-
	2. Deep dark brown sandy soil (Low rainfall area)	Pearl millet	1.Life saving irrigation if available 2.Thiourea spray @ 0.1%		-do-
		Clusterbean	-do-		-do-
		Cowpea	Life saving irrigation if available		-do-
		Moong	-do-		-do-
		Mothbean	-do-		-do-
	3. Rainfed Other soils	Pearl millet	1.Life saving irrigation if available 2.Thiourea spray @ 0.1%		-do-
		Clusterbean			
		Cowpea			
		Moong			

		Mothbean			

2.1.2 Irrigated situation: N.A

2.2 Unusual rains (untimely, unseasonal etc.): N.A

2.3 Floods : N.A

2.4 Extreme events: Heat wave/cold wave/frost

Extreme event	Suggested contingency measures			
	Seedling/nursery stage	Vegetative stage	Reproductive stage	At harvest
Heat wave				
1.Pearlmillet	Shelter belt	Shelter belt	Apply irrigation	
2.Clusterbean	-do-	-do-	-do-	
3.Cowpea	-do-	-do-	-do-	
4.Moong	-do-	-do-	-do-	
Cold wave				
1.Wheat	-	-	-	-
2.Mustard	-	-	0.1% H_2SO4 spray or apply irrigation or smoking of straw on north-west side of the field or shelter belt	-
3.Gram	-	-	-do-	
Frost				

Horticultural crop				
1.Tomato			0.1% H_2SO4 spray or apply irrigation or smoking of straw on north-west side of the field or shelter belt	
2.Brinjal			-do-	
Aonla & ber			Thatch making up to 3 years old plantation	

2.5 Contingent strategies for livestock, Poultry, & Fisheries

2.5.1 Livestock

	Suggested contingency measures		
	Before the event	During the event	After the event
Drought			
Feed & fodder Availability	Sufficient	Sufficient	Harvest the dried crops and grasses & bring from neighboring state/district
Drinking water	Sufficient	Sufficient	Sufficient
Health &diseases	Sufficient	Sufficient	Sufficient Govt. facilities

2.5.2 Poultry

	Suggested contingency measures		
	Before the event	During the event	After the event
Drought			
Feed & fodder Availability	Sufficient	Sufficient	Sufficient
Drinking water	Sufficient	Sufficient	Sufficient
Health &diseases	Sufficient	Sufficient	Sufficient

2.5.3 Fisheries: N.A