State: Assam

Agriculture Contingency Plan for District: Hailakandi

1.0 Di	strict Agriculture profile						
1.1	Agro-Climatic/Ecological Zone						
	Agro Ecological Sub Region (ICAR)	Assam And Bengal Plain, Hot Su	ubhumid To Humid (Inclusion O	Of Perhumid) Eco-Region (15.3)			
	Agro-Climatic Zone (Planning Commission)	Eastern Himalayan Region (II)					
	Agro Climatic Zone (NARP)	Barak Valley Zone, Assam 99.85	Barak Valley Zone, Assam 99.85% and Hill Zone 0.15%				
	List all the districts falling under the NARP Zone*	Hailakandi AS-5 99.85%	Hailakandi AS-5 99.85%				
	(*>50% area falling in the zone)	Cachar AS-5 62.63%					
		Karimganj AS-5 97.72%					
	Geographic coordinates of district headquarters						
	Geographic coordinates of district headquarters	Latitude	Longitude	Altitude			
		90'40 E	20'04 N	36'5 msl			
	Name and address of the concerned ZRS/ ZARS/ RARS/ RRS/ RRTTS	Regional Agricultural Research S	Station, Akbarpur, Karimganj				
	Mention the KVK located in the district with address	s Serispore, Hailakandi, Assam					
	Name and address of the nearest Agromet Field Unit (AMFU, IMD) for agro-advisories in the Zone	RARS: Akbarpur, Assam Agricu PIN-788710(ASSAM)	ltural University, Jorhat. Distric	t: Karimganj,			

1.2	Rainfall	Normal RF(mm)	Normal Rainy days (number)	Normal Onset (specify week and	Normal Cessation (specify week and
				month)	month)
	SW monsoon (June-Sep):	1578.5	89	1 st week of June	4 st week of June
	NE Monsoon(Oct-Dec):	326.7	24	1 st week of Oct.	2 nd week of Dec.
	Winter (Jan- March)	221.6	7	1 st week of Feb.	4 st week of March
	Summer (Apr-May)	415.9	20	1 st week of April	continuous
	Annual	2542.7	140	-	-

1.3	Land use	Geographical	Cultivable	Forest	Land under	Permanent	Cultivable	Land	Barren and	Current	Other
	pattern of the	area	area	area	non-	pastures	wasteland	under	uncultivable	fallows	fallows
	district (latest				agricultural use			Misc.	land		
	statistics)							tree			
								crops			

							and groves			
Area ('000 ha)	132.7	50.748	63.661	9.613	1.407	5.751	2.572	-	2.001	2.538

1.4	Major Soils (common names like red sandy loam deep soils (etc.,)*	Area ('000 ha)**	Percent (%) of total geographical area
	1. Tillah land (red soil)	1.852	3.6
	2. Alluvial soil	17.794	31.4
	3. Sandy soil	5.547	9.6
	4. Sandy loam	21.028	37.8
	5. Clay and clay loam	9.812	17.6
	Others (specify):	-	-

* mention colour, depth and texture (heavy, light, sandy, loamy, clayey etc) and give vernacular name, if any, in brackets (data source: Soil Resource Maps of NBSS & LUP)**

1.5	Agricultural land use	Area ('000 ha)	Cropping intensity %
	Net sown area	45.157	
	Area sown more than once	5.400	137%
	Gross cropped area	50.554	

1.6	Irrigation	Area ('000 ha)	Area ('000 ha)				
	Net irrigated area	1.832					
	Gross irrigated area	1.832					
	Rainfed area	44.393					
	Sources of Irrigation	Number	Area ('000 ha)	Percentage of total irrigated area			
	Canals						
	Tanks						
	Open wells						
	Bore wells						
	Lift irrigation schemes	18	Defang	Nil			
	Micro-irrigation						
	Other sources (please specify)						
	Total Irrigated Area						
	Pump sets	1832	1.792	3.97%			

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			
Critical			
Semi- critical			
Safe			
Wastewater availability and use			
Ground water quality			

1.7 Area under major field crops & horticulture (as per latest figures) (Specify year 2008-09)

1.7	Major field crops		Area ('000 ha)								
	cultivated	Kharif		Rabi							
		Irrigated	Rainfed	Total	Irrigated	Rainfed	Total	Summer	Grand total		
	Paddy	-	39.060	39.060	-	4.040	4.040	5.710	48.810		
	Pulses	-	0.150	0.150	-	2.150	2.150	1.200	3.500		
	Oilseeds	-	-	-	-	0.922	0.922	-	0.922		
	Sugarcane	-	0.180	0.180	-			-	0.180		
	Maize	-	0.026	0.026	-			-	0.026		

Horticulture crops -		Area ('000 ha)					
Fruits	Total	Irrigated	Rainfed				
Banana	1.587	-	1.587				
Pineapple	0.550	-	0.550				
Jack fruit	0.367	-	0.367				
Assam lemon	0.200	-	0.200				
Others	0.556	-	0.556				
Horticulture crops -	Total	Irrigated	Rainfed				
Vegetables							

Cauliflower	1.399	-	1.399
Cabbage	1.167	-	1.167
Radish	0.934	-	0.934
Knolkhol	0.700	-	0.700
Colocasia	0.030	-	0.030
Others	0.469	-	0.469
Medicinal and	Total	Irrigated	Rainfed
Aromatic crops			
Medicinal crops	0.40		0.40
Plantation crops	Total	Irrigated	Rainfed
Arecanut	2.850		2.850
Cashewnut	0.285		0.285
Coconut	0.280		0.280
Eg., industrial pulpwood crops etc.			
Fodder crops	Total	Irrigated	Rainfed
Oat	0.162	-	0.162
Napier	0.003	-	0.003
Maize	0.003	0.003	-
Total fodder crop area	0.169	0.003	0.166
Grazing land	0.019	-	0.019
Sericulture etc	-	-	-
Others (specify)	-	-	-

1.8	Livestock	Male ('000)	Female ('000)	Total ('000)
	Non descriptive cattle (local low yielding)	79.306	61.295	140.601
	Improved / Crossbred cattle	4.661	121.081	16.742
	Non descriptive Buffaloes (local low yielding)	14.901	18.580	33.481
	Graded Buffaloes	0.100	0.066	0.166
	Goat	22.347	47.323	69.670
	Sheep	5.509	7.997	13.506
	Pig	1.894	2.776	4.675
	Commercial dairy farms (Number)	-	-	_

1.9	Poultry		No. of farms		То	tal No. of birds	('000)	
	Commercial		84	25.200				
	Backyard		- 378.4		378.490]		
	Ducks		-			173.200		
	Others		-			23.527		
1.10	Fisheries (Data source: Chief)	Planning Officer)						
	A. Capture NA							
	i) Marine (Data Source: Fisheries Department)	No. of fishermen	Во	ats		Nets		Storage facilites (ice
			Mechanized	Non- mechanized	Mechanized (Trawl nets, Gill nets)	Non-mecha (Shore Seines, trap net	, Stake &	plants etc.)
		-	-	-	-	-		-
	ii) Inland (Data Source: Fisheries Department)	No. Farmer ow	ned ponds	No. of F	Reservoirs	No.	. of village	tanks
		12335			-		620	
	B. Culture							
				Water Spro	ead Area (ha)	Yield (t/ha)	Product	tion ('000 tons)
	i) Brackish water (Data Sourc	e: MPEDA/ Fisheries Dep	partment)					
	ii) Fresh water (Data Source:	Fisheries Department)		7	761	1.06		6.280
	Others							

1.11 Production and Productivity of major crops

1.11	Name of crop]	Kharif		Rabi Sumi		nmer	Total		Crop
		Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)	residue as fodder (`000
										tons)
Major l	Field crops (Crop	os to be identif	fied based on total a	icreage)						
	Paddy	93.744	2400	10.504	2600	2.160	1800	106.408	2267	85.126
	Pulses	0.870	5800	124.700	5800	6.240	5200	131.810	5600	11.862
	Oilseed	-	-	4.057	4400	-	-	4.057	4400	3.654

Sugarcane	73.440	4080	-	-	-	-	73.440	4080	58.752
Maize	0.019	730	-	-	-	-	0.019	730	0.016
Major Horticultural crop	s (Crops to	be identified based	d on total acre	eage)			÷		
Banana	19.996	12600	-	-	-	-	19.996	12600	-
Pineapple	7.550	13700	-	-	-	-	7.550	13700	-
Assam lemon	1.792	8900	-	-	-	-	1.792	8900	-
Jack fruit	2.886	7800	-	-	-	-	2.886	7800	-
Guava	2.640	19200	-	-	-	-	2.640	19200	-
Mango	1.473	11250	-	-	-	-	1.473	11250	-
Colocasia	0.039	13100					0.039	13100	-
Kharif vegetables	2.724	12640	-	-	-	-	2.724	12640	-
Rabi vegetables	-	-	7.888	17530	-	-	7.888	17530	-
Turmeric	0.013	545	-	-	-	-	0.013	545	-
Ginger	0.012	920	-	-	-	-	0.012	920	-

1.12	Sowing window for 5 major field crops (start and end of normal sowing period)	Paddy	Pulses- Rajmah	Oilseed- Toria	Potato	Pea
	Kharif- Rainfed	1 st wk of April to 1 st wk of	-	-	-	
		May				
	Kharif-Irrigated	2 nd wk of August	-	-	-	
	Rabi- Rainfed	2 nd wk of July to 1 st wk of	1 st wk of Sept to 1 st wk	Last wk of Oct to 1st	1 st wk of Oct-Last Wk	Last wk of Nov
		Aug.	of Oct	wk of Nov.	of Oct	to 1 st wk of Dec
	Rabi-Irrigated	-	-	-	-	-
	Summer-Rainfed	1 st wk of Nov. to 2 nd wk Dec.	1 st wk Feb to 1 st wk of	-	-	-
			Mar.			

1.13	What is the major contingency the district is prone to? (Tick mark)	Regular	Occasional	None
	Drought		\checkmark	
	Flood			
	Cyclone		\checkmark	

Hail storm		
Heat wave		
Cold wave		
Frost		
Sea water intrusion		\checkmark
Pests and disease outbreak (specify)	\checkmark	
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: Yes
		Soil map as Annexure 3	Enclosed: No

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 ^a	Normal Crop / Cropping system ^b	Change in crop / cropping system ^c including variety	Agronomic measures ^d	Remarks on Implementation ^e
Delay by 2 weeks (June 3 rd week)	Rainfed low land	Sali mono crop Sali rice: High Yielding Variety Ranjit, Bahadur	Does not require change in cropping system High Yielding Variety Ranjit, Bahadur, Pankaj,Kushal, Moniram, Local bao paddy, Scented rice: Badsahbhog	Preparation of seed bed & main field immediately after rainfall, Rainwater harvesting by making bund of 30cm height, Utilization of waters for irrigation from nearby beels, ponds,rivers, natural depressions etc, Decrease spacing	Supply of HYV of Sali paddy in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY

Sali rice-boro rice Sali rice: High Yielding Variety Ranjit, Bahadur Boro rice: Bahadur	Does not require change in cropping system For Sali rice var. same as above Boro rice: Kanaklata, Chandrama, Bishnu Prasad, IR-68, Local (Rataboro, Kalaboro)	For Sali rice same as above For boro rice, timely land preparation, sowing and transplanting	Same as above
Sali rice-ahu rice Sali rice: High Yielding Variety Ranjit, Bahadur Ahu rice: Toposil (Local)	Does not require change in cropping system For Sali rice var. same as above Ahu rice (transplanted):Luit, Disang, Krishna, Gopinath, Jaya, Cauvery, IR-36, IR-50, Culture-1, Socket-4 Ahu rice (Direct seeded): Koimurali, Luit	For Sali rice same as above, For ahu, timely land preparation, sowing, integrated weed management	Same as above

Rainfed Medium land	Sali rice-Oilseeds/pulses Sali rice: High Yielding Variety Ranjit, Bahadur Oilseeds: Rapeseed:M-27, TS-29,Linseed: Local var, Sesamum: Local var, Pulses: Rajmah (Local), Pea (Local)	Does not require change in cropping system Sali rice: High Yielding Variety Ranjit, Bahadur, Pankaj,Kushal, Moniram, Local bao paddy, Scented rice: Badsahbhog Oilseeds: Rapeseed:M- 27, TS-36, TS-38, TS-29, Linseed:T-397 & Local Sesamum: Madaavi, Gouri, Vinayak, Punjab tall No.1, RT-1& Local Pulses: Rajmah (Local, Uday, PDR-14) Pea: (Azad P-1, T-163, Boneville), Blackgram (Local, T-9, T-27, KU- 309)	For Sali rice same as rainfed lowland situation Early sowing of rapeseed for utilization of residual soil moisture, minimum/zero tillage for rapeseed, other moisture conservation measures such as mulching, Ridge and furrow cultivation of Raimah,Cultivation of short duration pulses like blackgram,pea etc.Utilization of waters for irrigation from nearby beels,ponds, rivers,natural depressions etc	Same as above. Supply of mechanical weeder under RKVY, Supply of water pumps, STW,LLP under RKVY
	Sali rice-winter vegetable Sali rice: High Yielding Variety Ranjit, Bahadur Winter vegetables: Varieties of Cabbage, Cauliflower, tomato,brinjal,coriander, spinach, Dolichos bean,potato, pumpkin, cowpea as per the variety available	Does not require change in cropping system Sali rice: High Yielding Variety Ranjit, Bahadur, Pankaj,Kushal, Moniram, Local bao paddy, Scented rice: Badsahbhog Winter vegetables: Cabbage (Drum head, Pride of India, Golden acre) Cauliflower (Snowball-16,Pusa snowball, Pusa Deepali	For Sali rice same as Rainfed low land situation Selection of important early season winter vegetables, timely land preparation, sowing, soil conservation measures such as mulching, application of organic manures like cowdung, vermicompost etc, mixed cropping, intercropping to be practised. Utilization of waters for irrigation from nearby beels,ponds, rivers,natural	For Sali paddy same as above Timely supply of HYV, short duration vegetable seeds, Supply of water pumps, STW, LLP under RKVY

	CS3.Sali rice-ahu rice	Tomato(Arka Alok, Surakha hybrid, Pusa Ruby), Brinjal(JC-1), Pusa Purple round, Pusa Purple long, Pusa Kranti, Chilli (Pusa Jwala, Krishna), Coriander (UP- 41,Pusa 860, Spinach(All Green, Pusa Jyoti, local Dolichos bean(Pusa Early Profile, HD-18) Potato(Kufri Chandramukhi, Kufri Jyoti, Kufri Sindhuri), pumpkin(Local), Cowpea (Pusa Barsati, Local)	depressions etc For Sali rice same as above,	Supply of HYV of Sali
	Sali rice: High Yielding Variety Ranjit, Bahadur Ahu rice: Toposil (Local)	For Sali rice var. same as above Ahu rice: Var. same as rainfed low land situation	For ahu, timely land preparation, sowing, integrated weed management	paddy in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY
Rainfed upland	Summer & Kharif vegetables-rabi vegetables Summer & Kharif vegetables: brinjal,snakegourd, okra, ridgegourd,bottlegourd, bittergourd, cucumber etc as per the variety available Winter vegetables: Var. same as rainfed medium land situation	Does not require change in cropping system Summer & Kharif vegetables: Brinjal JC-1, Pusa Purple round, Pusa Purple long, Pusa Kranti, Snakegourd (Long green, Long white, Extra long, local) Okra (Prabhani Kranti, Pusa Sawani, Arka Anamika, local), Ridge gourd(Pusa Nasdar, AAUJ-2, AAUJ-3, local),Bottlegourd(Pusa	Timely sowing/planting of summer vegetables, drip irrigation,moisture conservation measures like mulching,use of more organic manures, ridge and furrow cultivation,rain water harvesting in tanks, Utilization of waters for irrigation from nearby beels,ponds, rivers,natural depressions etc For winter vegetables same as rainfed medium land situation	Timely supply of HYV, short duration vegetable seeds, Supply of water pumps, STW, LLP under RKVY

Summer Prolific Long,
Pusa Summer Prolific
round, Bittergourd (Pusa
do Mausmi, Long green,
Extra long, Coimbatore
long, Long green
monsoon), Cucumber (
Chinese green, Pusa
sanyog, Poinsette, AAUC-
1, AAUC-2, AAUC-3,
AAUC-4,
Winter Vegetables:
Var same as Rainfed
Medium land situation

Condition			Suggested Contingency measures			
Early season drought (delayed onset)	Major Farming situation ^a	Normal Crop/cropping system ^b	Change in crop/cropping system ^c	Agronomic measures ^d	Remarks on Implementation ^e	
Delay by 4 weeks (July 1 st week)	Rainfed Low land	Sali mono crop Sali rice: High Yielding Variety Ranjit, Bahadur	Medium duration Sali rice var :Basundhara, Satyaranjan and short duration var like Disang, Luit,Kopilee, Kolong High Yielding Variety: Pankaj,Lakhimi, Prafulla, Gitesh, Scented rice: Badsahbhog	Preparation of seed bed & main field immediately after rainfall,Rainwater harvesting by making bund of 30cm height, Irrigate rice field only and when necessary. Care should be taken so that cracks does not develop in the field	Supply of seeds through national Calamity relief fund in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY	

Sali rice-boro rice Sali rice: High Yielding Variety Ranjit, Bahadur Soro rice: Bahadur	For Sali rice same as above Boro rice: Kanaklata, Chandrama, Bishnu Prasad, IR-68, Local (Rataboro, Kalaboro)	For Sali rice same as above For boro rice, timely land preparation, sowing and transplanting, Rainwater harvesting, utilization of water from nearby beels, ponds, rivers, natural depressions etc.	Same as above
Sali rice-ahu rice Sali rice: High Yielding Variety Ranjit, Bahadur Ahu rice: Toposil (Local)	For Sali rice var. same as above Ahu rice (transplanted):Luit, Disang, Krishna, Gopinath, Jaya, Cauvery, IR-36, IR-50, Culture-1, Socket-4 Ahu rice (Direct seeded): Koimurali, Luit	For Sali rice same as above, For ahu, timely land preparation, sowing, integrated weed management, Rainwater harvesting, utilization of water from nearby beels, ponds, rivers, natural depressions etc, use of drum seeder	Same as above

Rainfed medium lan	 Sali rice-Oilseeds/pulses Sali rice: High Yielding Variety Ranjit, Bahadur Oilseeds: Rapeseed:M-27, TS-29,Linseed: Local var, Sesamum: Local var, Pulses: Rajmah (Local), Pea (Local) 	Sali rice: Medium duration Sali rice var :Basundhara, Satyaranjan and short duration var like Disang, Luit,Kopilee, Kolong High Yielding Variety Pankaj,Lakhimi, Prafulla, Gitesh, Scented rice: Badsahbhog Oilseeds: Rapeseed:M- 27, TS-36, TS-38, TS-29, Linseed:T-397 & Local var, Sesamum: Madaavi, Gouri, Vinayak, Punjab tall No.1, RT-1& Local var, Pulses: Rajmah (Local, Uday, PDR-14) Pea: (Azad P-1, T-163, Boneville), Blackgram (Local, T-9, T-27, KU-	For Sali rice same as rainfed lowland situation Early sowing of rapeseed for utilization of residual soil moisture, minimum/zero tillage for rapeseed, other moisture conservation measures such as mulching, Ridge and furrow cultivation of Raimah,Cultivation of short duration pulses like blackgram,pea etc.Utilization of waters for irrigation from nearby beels,ponds, rivers,natural depressions etc	Same as above. Supply of mechanical weeder under RKVY, Supply of water pumps, STW,LLP under RKVY
	Sali rice-winter vegetable Sali rice: High Yielding Variety Ranjit, Bahadur Winter vegetables: Varieties of Cabbage, Cauliflower, tomato,brinjal,coriander, spinach, Dolichos bean,potato, pumpkin, cowpea as per the variety	Boneville), Blackgram (Local, T-9, T-27, KU- 309) Sali rice: For Sali rice var same as above Winter vegetables: Cabbage (Drum head, Pride of India, Golden acre) Cauliflower (Snowball-16,Pusa snowball, Pusa Deepali Tomato(Arka Alok, Surakha hybrid, Pusa Ruby), Brinjal(JC-1), Pusa Purple round, Pusa	For Sali rice same as Rainfed low land situation Selection of important early season winter vegetables, timely land preparation, sowing, soil conservation measures such as mulching, application of organic manures like cowdung, vermicompost etc, mixed cropping, intercropping to be practised. Utilization of waters for irrigation from nearby	For Sali paddy same as above Timely supply of HYV, short duration vegetable seeds, Supply of water pumps, STW, LLP under RKVY

	available	Purple long, Pusa Kranti, Chilli (Pusa Jwala, Krishna), Coriander (UP- 41,Pusa 860, Spinach(All Green, Pusa Jyoti, local Dolichos bean(Pusa Early Profile, HD-18) Potato(Kufri Chandramukhi, Kufri Jyoti, Kufri Sindhuri), pumpkin(Local), Cowpea (Pusa Barsati, Local)	beels,ponds, rivers,natural depressions etc	
	Sali rice-ahu rice Sali rice: High Yielding Variety Ranjit, Bahadur Ahu rice: Toposil (Local)	For Sali rice var same as above Ahu rice: Var. same as rainfed low land situation	For Sali rice same as above, For ahu, timely land preparation, sowing, integrated weed management	Supply of HYV of Sali paddy in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY
Rainfed upland	Summer & Kharif vegetables-rabi vegetables Summer & Kharif vegetables: brinjal,snakegourd, okra, ridgegourd,bottlegourd, bittergourd, cucumber etc as per the variety available Winter vegetables: Var. same as rainfed medium land situation	Summer & Kharif vegetables: Brinjal JC-1, Pusa Purple round, Pusa Purple long, Pusa Kranti, Snakegourd (Long green, Long white, Extra long, local) Okra (Prabhani Kranti, Pusa Sawani, Arka Anamika, local), Ridge gourd(Pusa Nasdar, AAUJ-2, AAUJ-3, local), Bottlegourd(Pusa Summer Prolific Long, Pusa Summer Prolific round,Bittergourd (Pusa do Mausmi, Long green, Extra long, Coimbatore long, Long green monsoon),Cucumber (Chinese green, Pusa	Timely sowing/planting of summer vegetables, drip irrigation,moisture conservation measures like mulching,use of more organic manures, ridge and furrow cultivation,rain water harvesting in tanks, Utilization of waters for irrigation from nearby beels,ponds, rivers,natural depressions etc For winter vegetables same as rainfed medium land situation	Timely supply of HYV , short duration vegetable seeds, Supply of water pumps, STW, LLP under RKVY

sanyog, Poinsette, AAUC-	
1, AAUC-2, AAUC-3,	
AAUC-4,	
Winter Vegetables:	
Var same as Rainfed	
Medium land situation	

Condition			Suggested Contingency measures			
Early season drought (delayed onset)	Major Farming situation ^a	Normal Crop/cropping system ^b	Change in crop/cropping system ^c	Agronomic measures ^d	Remarks on Implementation ^e	
(delayed onset) Delay by 6 weeks (July 3 rd week)	Rainfed Lowland	Sali mono crop Sali rice: High Yielding Variety Ranjit, Bahadur	Pankaj,Lakhimi,Swarnaprova, Monoharsali, Andrewsali, Prafulla,Gitesh (Transplanted) Luit and Disang (direct seeded)	Preparation of seed bed & main field immediately after rainfall,Rainwater harvesting by making bund of 30cm height, Irrigate rice field only and when necessary. Care should be taken so that cracks do not develop in the field. Divert some area from paddy to pulses and oilseeds in medium land, application of organic matter, closer spacing, stager planting	Supply of seeds through national Calamity relief fund in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY	
		Sali rice-boro rice Sali rice: High Yielding Variety Ranjit, Bahadur Boro rice: Bahadur	For Sali rice same as above Boro rice: Kanaklata,Joymati, Chandrama, Bishnu Prasad, IR- 68, Local (Rataboro, Kalaboro)	For Sali rice same as above For boro rice, timely land preparation, sowing and transplanting, Rainwater harvesting, utilization of water from nearby beels, ponds, rivers, natural depressions etc.	Same as above	
		Sali rice-ahu rice Sali rice: High Yielding Variety Ranjit, Bahadur	For Sali rice var. same as above Ahu rice (transplanted):Luit, Disang, Gopinath, Jaya,	For Sali rice same as above, For ahu, timely land preparation, sowing,	Same as above	

	Ahu rice: Toposil (Local)	Ahu rice (Direct seeded): Koimurali, Luit	integrated weed management, Rainwater harvesting, utilization of water from nearby beels, ponds, rivers, natural depressions etc, use of drum seeder	
Rainfed medium land	Sali rice-Oilseeds/pulses Sali rice: High Yielding Variety Ranjit, Bahadur Oilseeds: Rapeseed:M-27, TS-29,Linseed: Local var, Sesamum: Local var, Pulses: Rajmah (Local), Pea (Local)	 Sali rice: Pankaj,Lakhimi,Swarnaprova, Monoharsali, Andrewsali, Prafulla,Gitesh (Transplanted) Luit and Disang (direct seeded) Oilseeds: Rapeseed:M-27, TS- 36, TS-38, TS-29, Linseed:T- 397 & Local var, Sesamum: Madaavi, Gouri, Vinayak, Punjab tall No.1, RT-1& Local var, Pulses: Rajmah (Local, Uday, PDR-14) Pea: (Azad P-1, T- 163, Boneville), Blackgram (Local, T-9, T-27, KU-309) 	For Sali rice same as rainfed lowland situation Early sowing of rapeseed for utilization of residual soil moisture, minimum/zero tillage for rapeseed, other moisture conservation measures such as mulching, Ridge and furrow cultivation of Raimah,Cultivation of short duration pulses like blackgram,pea etc.Utilization of waters for irrigation from nearby beels,ponds, rivers,natural depressions etc	Same as above. Supply of mechanical weeder under RKVY, Supply of water pumps, STW,LLP under RKVY
	Sali rice-winter vegetable Sali rice: High Yielding Variety Ranjit, Bahadur Winter vegetables: Varieties of Cabbage, Cauliflower, tomato,brinjal,coriander, spinach, Dolichos bean,potato, pumpkin,	Sali rice: For Sali rice var same as above Winter vegetables: Cabbage (Drum head, Pride of India, Golden acre) Cauliflower (Snowball-16,Pusa snowball, Pusa Deepali Tomato(Arka Alok, Surakha hybrid, Pusa Ruby), Brinjal(JC-1), Pusa Purple round, Pusa Purple long, Pusa Kranti, Chilli (Pusa Jwala, Krishna), Coriander (UP-	For Sali rice same as Rainfed low land situation Selection of important early season winter vegetables, timely land preparation, sowing, soil conservation measures such as mulching, application of organic manures like cowdung, vermicompost etc, mixed cropping, intercropping to be practised.	For Sali paddy same as above Timely supply of HYV, short duration vegetable seeds, Supply of water pumps, STW, LLP under RKVY

	cowpea as per the variety available	41,Pusa 860, Spinach (All Green, Pusa Jyoti, local Dolichos bean (Pusa Early Profile, HD-18) Potato (Kufri Chandramukhi, Kufri Jyoti, Kufri Sindhuri), pumpkin(Local), Cowpea (Pusa Barsati, Local)	Utilization of waters for irrigation from nearby beels,ponds, rivers,natural depressions etc	
	Sali rice-ahu rice Sali rice: High Yielding Variety Ranjit, Bahadur Ahu rice: Toposil (Local)	For Sali rice var same as above Ahu rice: Var. same as rainfed low land situation	For Sali rice same as above, For ahu, timely land preparation, sowing, integrated weed management	Supply of HYV of Sali paddy in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY
Rainfed upland	Summer & Kharif vegetables-rabi vegetables Summer & Kharif vegetables: brinjal,snakegourd, okra, ridgegourd,bottlegourd, bittergourd, cucumber etc as per the variety available Winter vegetables: Var. same as rainfed medium land situation	Summer & Kharif vegetables: Brinjal JC-1, Pusa Purple round, Pusa Purple long, Pusa Kranti, Snakegourd (Long green, Long white, Extra long, local) Okra (Prabhani Kranti, Pusa Sawani, Arka Anamika, local), Ridge gourd(Pusa Nasdar, AAUJ-2, AAUJ-3, local),Bottlegourd(Pusa Summer Prolific Long, Pusa Summer Prolific round,Bittergourd (Pusa do Mausmi, Long green, Extra long, Coimbatore long, Long green monsoon),Cucumber (Chinese green, Pusa sanyog, Poinsette,AAUC-1, AAUC-2, AAUC-3, AAUC-4, Winter Vegetables: Var same as Rainfed Medium land situation	Timely sowing/planting of summer vegetables, drip irrigation,moisture conservation measures like mulching,use of more organic manures, ridge and furrow cultivation,rain water harvesting in tanks, Utilization of waters for irrigation from nearby beels,ponds, rivers,natural depressions etc For winter vegetables same as rainfed medium land situation	Timely supply of HYV , short duration vegetable seeds, Supply of water pumps, STW, LLP under RKVY

Condition			Sugg	ested Contingency measures	
Early season drought (delayed onset)	Major Farming situation ^a	Normal Crop/cropping system ^b	Change in crop/cropping system ^c	Agronomic measures ^d	Remarks on Implementation ^e
(delayed onset) Delay by 8 weeks (August 1 st week)	Rainfed low land	Sali mono crop Sali rice: High Yielding Variety Ranjit, Bahadur	Monoharsali, Andrewsali, Prafulla,Gitesh (Transplanted) Luit and Disang (direct seeded)	Preparation of seed bed & main field immediately after rainfall, closer spacing with more no. of seedlings (4-5) per hill, stager planting/ double transplanting with 50-60 days old seedling Rainwater harvesting by making bund of 30cm height, Irrigate rice field only and when necessary. Care should be taken so that cracks do not develop in the field. Divert some area from paddy to pulses and oilseeds in medium land, application of organic matter,	Supply of seeds through national Calamity relief fund in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY
		Sali rice-boro rice Sali rice: High Yielding Variety Ranjit, Bahadur Boro rice: Bahadur	For Sali rice same as above Boro rice: Kanaklata, Chandrama, Bishnu Prasad, IR- 68, Local (Rataboro, Kalaboro)	For Sali rice same as above For boro rice, timely land preparation, sowing and transplanting, Rainwater harvesting, utilization of water from nearby beels, ponds, rivers, natural depressions etc.	Same as above
		Sali rice-ahu rice Sali rice: High Yielding Variety Ranjit, Bahadur Ahu rice: Toposil (Local)	For Sali rice var. same as above Ahu rice (transplanted):Luit, Disang, Gopinath, Jaya,Krishna, Cauvery, IR-36, IR-50, Ratna, Culture-1, Socket-4	For Sali rice same as above, For ahu, timely land preparation, sowing, integrated weed	Same as above

		Ahu rice (Direct seeded): Koimurali, Luit	management, Rainwater harvesting, utilization of water from nearby beels, ponds, rivers, natural depressions etc, use of drum seeder	
Rainfed medium	I I I I I I I I I I I I I I I I I I I	Sali rice: Monoharsali, Andrewsali, Prafulla,Gitesh (Transplanted) Luit and Disang (direct seeded) Oilseeds: Rapeseed:M-27, TS- 36, TS-38, TS-29, Linseed:T- 397 & Local var, Sesamum: Madaavi, Gouri, Vinayak, Punjab tall No.1, RT-1& Local var, Pulses: Rajmah (Local, Uday, PDR-14) Pea: (Azad P- 1, T-163, Boneville), Blackgram (Local, T-9, T-27, KU-309)	For Sali rice same as rainfed lowland situation Early sowing of rapeseed for utilization of residual soil moisture, minimum/zero tillage for rapeseed, other moisture conservation measures such as mulching, Ridge and furrow cultivation of Raimah,Cultivation of short duration pulses like blackgram,pea etc.Utilization of waters for irrigation from nearby beels,ponds, rivers,natural depressions etc	Same as above. Supply of mechanical weeder under RKVY, Supply of water pumps, STW,LLP under RKVY
	Sali rice-winter vegetable Sali rice: High Yielding Variety Ranjit, Bahadur Winter vegetables: Varieties of Cabbage, Cauliflower, tomato,brinjal,coriander, spinach, Dolichos bean,potato, pumpkin, cowpea as per the variety	Sali rice: For Sali rice var same as above Winter vegetables: Cabbage (Drum head, Pride of India, Golden acre) Cauliflower (Snowball-16,Pusa snowball, Pusa Deepali Tomato(Arka Alok, Surakha hybrid, Pusa Ruby), Brinjal(JC-1), Pusa Purple round, Pusa Purple long, Pusa Kranti, Chilli (Pusa Jwala, Krishna), Coriander (UP-41,Pusa 860,	For Sali rice same as Rainfed low land situation Selection of important early season winter vegetables, timely land preparation, sowing, soil conservation measures such as mulching, application of organic manures like cowdung, vermicompost etc, mixed cropping, intercropping to be practised. Utilization of waters for irrigation from	For Sali paddy same as above Timely supply of HYV, short duration vegetable seeds, Supply of water pumps, STW, LLP under RKVY

	available	Spinach(All Green, Pusa Jyoti, local Dolichos bean(Pusa Early Profile, HD-18) Potato(Kufri Chandramukhi, Kufri Jyoti, Kufri Sindhuri), pumpkin(Local), Cowpea (Pusa Barsati, Local)	nearby beels,ponds, rivers,natural depressions etc	
	Sali rice-ahu rice Sali rice: High Yielding Variety Ranjit, Bahadur Ahu rice: Toposil (Local)	For Sali rice var same as above Ahu rice: Var. same as rainfed low land situation	For Sali rice same as above, For ahu, timely land preparation, sowing, integrated weed management	Supply of HYV of Sali paddy in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY
Rainfed upland	Summer & Kharif vegetables-rabi vegetables Summer & Kharif vegetables: brinjal,snakegourd, okra, ridgegourd,bottlegourd, bittergourd, cucumber etc as per the variety available Winter vegetables: Var. same as rainfed medium land situation	Summer & Kharif vegetables: Brinjal JC-1, Pusa Purple round, Pusa Purple long, Pusa Kranti, Snakegourd (Long green, Long white, Extra long, local) Okra (Prabhani Kranti, Pusa Sawani, Arka Anamika, local), Ridge gourd(Pusa Nasdar, AAUJ-2, AAUJ-3, local),Bottlegourd(Pusa Summer Prolific Long, Pusa Summer Prolific round,Bittergourd (Pusa do Mausmi, Long green, Extra long, Coimbatore long, Long green monsoon),Cucumber (Chinese green, Pusa sanyog, Poinsette,AAUC-1, AAUC-2, AAUC-3, AAUC-4, Winter Vegetables: Var same as Rainfed Medium land situation	Timely sowing/planting of summer vegetables, drip irrigation,moisture conservation measures like mulching,use of more organic manures, stand establishment method, ridge and furrow cultivation,rain water harvesting in tanks, Utilization of waters for irrigation from nearby beels,ponds, rivers,natural depressions etc For winter vegetables same as rainfed medium land situation	Timely supply of HYV, short duration vegetable seeds, Supply of water pumps, STW, LLP under RKVY

Condition			Suggestee	l Contingency measures	
Early season drought (Normal onset)	Major Farming situation ^a	Normal Crop/cropping system ^b	Crop management ^e	Soil nutrient & moisture conservation measues ^d	Remarks on Implementation ^e
Normal onset followed by 15- 20 days dry spell after sowing leading to poor germination/crop stand etc.	Rainfed Lowland	Sali mono crop Sali rice: High Yielding Variety Ranjit, Bahadur, Pankaj,Kushal, Moniram, Local bao paddy, Scented rice: Badsahbhog	 1.Thining and gap filling the existing crop 2. Resowing with short duration variety, seeds should be treated with 4% MOP for 24 hrs & drying in shade 3.Mat nursery technique to meet the shortage of seedlings 	 Top dressing of N, P K top dressing in the line sown crops, Apply P upto 3 weeks after seeding & K upto flowering Application of sufficient FYM and weeding Rainwater harvesting by 30 cm high bunding 	Buffer seed stock Supply of seeds through national Calamity relief fund in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY
		Sali rice-Boro rice For Sali rice same as above Boro rice: Kanaklata, Chandrama, Bishnu Prasad, IR-68, Local (Rataboro, Kalaboro)	-Do-	-Do-	-Do-
		Sali rice-Ahu rice For Sali rice var. same as CS1 Ahu rice (transplanted):Luit, Disang, Gopinath, Jaya,Krishna, Cauvery, IR-36, IR-50, Ratna, Culture-1, Socket-4 Ahu rice (Direct seeded): Koimurali, Luit	Same as CS1	Same as CS1	Same as CS1
	Rainfed medium land	Sali rice-Oilseeds/pulses For Sali rice var. same as rainfed lowland situation Oilseeds: Rapeseed:M-27, TS-36, TS-38, TS-29, Linseed:T-397 & Local var, Sesamum: Madaavi, Gouri,	 Thining and gap filling the existing crop Resowing with short duration variety, seeds should be treated with 4% MOP for 24 hrs & drying in shade Mat nursery technique to 	1.Top dressing of N, P & K top dressing in the line sown crops, Apply P upto 3 weeks after seeding & K upto flowering 2. Application of	Buffer seed stock Supply of seeds through national Calamity relief fund in time. Procurement of certified seeds

Vinayak, Punjab tall No.1, RT- 1& Local var, Pulses: Rajmah (Local, Uday, PDR-14) Pea: (Azad P-1, T-163, Boneville), Blackgram (Local, T-9, T-27, KU-309)	meet the shortage of seedlings 5.Timely land preparation and sowing of oilseeds	sufficient FYM and weeding 3. Rainwater harvesting by 30 cm high bunding 4.Ridge and furrow cultivation of Rajmah 5.Zero tillage for toria and mulching	from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY
 Sali rice-winter vegetables For Sali rice var same as rainfed lowland situation Winter vegetables: Cabbage (Drum head, Pride of India, Golden acre) Cauliflower (Snowball-16,Pusa snowball, Pusa Deepali Tomato(Arka Alok, Surakha hybrid, Pusa Ruby), Brinjal(JC-1), Pusa Purple round, Pusa Purple long, Pusa Kranti, Chilli (Pusa Jwala, Krishna), Coriander (UP- 41,Pusa 860, Spinach(All Green, Pusa Jyoti, local Dolichos bean(Pusa Early Profile, HD-18) Potato(Kufri Chandramukhi, Kufri Jyoti, Kufri Sindhuri), pumpkin(Local), Cowpea (Pusa Barsati, Local) 	For Sali rice same as above Timely land preparation and sowing of vegetables	For Sali rice same as above	Same as above
Sali rice- Ahu rice For Sali rice var same as rainfed lowland situation Ahu rice (transplanted):Luit, Disang, Gopinath, Jaya,Krishna, Cauvery, IR-36, IR-50, Ratna, Culture-1, Socket-4	Same as rainfed low land situation for both Sali and Ahu	Same as rainfed low land situation for both Sali and Ahu	Same as rainfed low land situation for both Sali and Ahu

Rainfed upland	Ahu rice (Direct seeded): Koimurali, Luit .Summer & Kharif vegetables-	1.Thinning and gap filling	1.Application of	Supply of seeds
	rabi vegetables Summer & Kharif vegetables: Brinjal JC-1, Pusa Purple round, Pusa Purple long, Pusa Kranti, Snakegourd (Long green, Long white, Extra long, local) Okra (Prabhani Kranti, Pusa Sawani, Arka Anamika, local), Ridge gourd(Pusa Nasdar, AAUJ-2, AAUJ-3, local),Bottlegourd(Pusa Summer Prolific Long, Pusa Summer Prolific round,Bittergourd (Pusa do Mausmi, Long green, Extra long, Coimbatore long, Long green monsoon),Cucumber (Chinese green, Pusa sanyog, Poinsette,AAUC-1, AAUC-2, AAUC-3, AAUC-4, Winter Vegetables: Var same as Rainfed Medium land situation	2. Resowing with short duration variety	sufficient amount of organic manure- vermicompost, FYM etc 2.Rainwater harvesting 3.Ridge and furrow cultivation 4.Apply N as top dress. P & K also top dress if not applied as basal in line sown crop	through national Calamity relief fund in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY

Condition			Suggested Contingency measures		
Mid season drought (long dry spell, consecutive 2 weeks rainless (>2.5 mm) period)	Major Farming situation ^a	Normal Crop/cropping system ^b	Crop management ^e	Soil nutrient & moisture conservation measues ^d	Remarks on Implementation ^e
At vegetative stage	Rainfed lowlad	CS1.Sali mono crop Sali rice : High Yielding Variety Ranjit, Bahadur, Pankaj,Kushal,	1. Resowing with short duration variety, seeds should be treated with 4% MOP for 24	1.Top dressing of N, P & K top dressing in the line sown crops, Apply	Buffer seed stock Supply of seeds through national

	Moniram, Local bao paddy, Scented rice: Badsahbhog	hrs & drying in shade 2.Mat nursery technique to meet the shortage of seedlings 3.Life saving irrigation 4.Integrated weed Management	P upto 3 weeks after seeding & K upto flowering 2. Application of sufficient FYM and weeding 3. Rainwater harvesting by 30 cm high bunding 4. Top dress with additional quantities of MOP @ 5 kg/bigha & incorporate it 5. Spray 2% KET solution on leaves	Calamity relief fund in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY
	Sali rice-Boro rice For Sali rice same as above Boro rice: Kanaklata, Chandrama, Bishnu Prasad, IR-68, Local (Rataboro, Kalaboro)	Same as above	Same as above	Same as above
	Sali rice-Ahu rice For Sali rice var. same as CS1 Ahu rice (transplanted):Luit, Disang, Gopinath, Jaya,Krishna, Cauvery, IR-36, IR-50, Ratna, Culture-1, Socket-4 Ahu rice (Direct seeded): Koimurali, Luit	Same as CS1	Same as CS1	Same as CS1
Rainfed Mec land	 Sali rice-Oilseeds/pulses For Sali rice var. same as rainfed lowland situation Oilseeds: Rapeseed:M-27, TS-36, TS-38, TS-29, Linseed:T-397 & Local var, Sesamum: Madaavi, Gouri, Vinayak, Punjab tall No.1, RT- 1& Local var, Pulses: Rajmah 	 1.Resowing with short duration variety, seeds should be treated with 4% MOP for 24 hrs & drying in shade 2.Mat nursery technique to meet the shortage of seedlings 3.Life saving irrigation 4.Integrated weed Management 5.Direct seeding of short 	1. Top dressing of N, P & K top dressing in the line sown crops, Apply P upto 3 weeks after seeding & K upto flowering 2. Application of sufficient FYM and weeding	Buffer seed stock Supply of seeds through national Calamity relief fund in time. Procurement of certified seeds from ASC Ltd & RARS, AAU.

(Local, Uday, PDR-14) Pea: (Azad P-1, T-163, Boneville), Blackgram (Local, T-9, T-27, KU-309)	duration late Sali var (Luit, Disang etc) 6.Divert some area from paddy to pulses & oilseeds	 Rainwater harvesting by 30 cm high bunding For Sali rice, top dress with additional quantities of MOP @ 5 kg/bigha & incorporate it Spray 2% KET solution on leaves Ridge and furrow cultivation of Rajmah Zero tillage for toria and mulching 	Supply of water pumps, STW,LLP under RKVY
Sali rice-winter vegetables For Sali rice var same as rainfed lowland situation Winter vegetables: Cabbage (Drum head, Pride of India, Golden acre) Cauliflower (Snowball-16,Pusa snowball, Pusa Deepali Tomato(Arka Alok, Surakha hybrid, Pusa Ruby), Brinjal(JC-1), Pusa Purple round, Pusa Purple long, Pusa Kranti, Chilli (Pusa Jwala, Krishna), Coriander (UP- 41,Pusa 860, Spinach(All Green, Pusa Jyoti, local Dolichos bean(Pusa Early Profile, HD-18) Potato(Kufri Chandramukhi, Kufri Jyoti, Kufri Sindhuri), pumpkin(Local), Cowpea (Pusa Barsati, Local)	For Sali rice same as above Divert some area from paddy to early winter vegetables	For Sali rice same as above Ridge and furrow cultivation of vegetables	Same as above
Sali rice- Ahu rice For Sali rice var same as rainfed lowland situation	Same as rainfed low land situation for both Sali and Ahu	Same as rainfed low land situation for both Sali and Ahu	Same as rainfed low land situation for both Sali and Ahu

	Ahu rice (transplanted):Luit, Disang, Gopinath, Jaya,Krishna, Cauvery, IR-36, IR-50, Ratna, Culture-1, Socket-4 Ahu rice (Direct seeded): Koimurali, Luit			
Rainfed Upland	Summer & Kharif vegetables- rabi vegetables Summer & Kharif vegetables: Brinjal JC-1, Pusa Purple round, Pusa Purple long, Pusa Kranti, Snakegourd (Long green, Long white, Extra long, local) Okra (Prabhani Kranti, Pusa Sawani, Arka Anamika, local), Ridge gourd(Pusa Nasdar, AAUJ-2, AAUJ-3, local),Bottlegourd(Pusa Summer Prolific Long, Pusa Summer Prolific round,Bittergourd (Pusa do Mausmi, Long green, Extra long, Coimbatore long, Long green monsoon),Cucumber (Chinese green, Pusa sanyog, Poinsette,AAUC-1, AAUC-2, AAUC-3, AAUC-4, Winter Vegetables: Var same as Rainfed Medium land situation	1. Thining and gap filling the existing crop 2. Re-sowing with short duration varieties 3. Integrated Weed Management	 1.Application of sufficient amount of organic manure- vermicompost, FYM etc 2.Rainwater harvesting 3.Ridge and furrow cultivation 4.Apply N as top dress. P & K also top dress if not applied as basal in line sown crop 5. P should be applied upto 3 weeks after seeding and K upto flowering 	Supply of seeds through national Calamity relief fund in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY

Condition			Suggested contingency measures		
Mid season drought (long dry	Major Farming situation ^a	Normal Crop/cropping system ^b	Crop management ^c	Soil nutrient & moisture conservation	Remarks on Implementation ^e
spell)				measues"	

At flowering/ Rainfed lowland fruiting stage Image: Comparison of the stage	Rainfed lowland	Sali mono crop Sali rice: High Yielding Variety Ranjit, Bahadur, Pankaj,Kushal, Moniram, Local bao paddy, Scented rice: Badsahbhog	 Life saving irrigation Direct seeding of short duration late variety (Luit, Disang etc) Integrated weed Management 	 Top dressing of urea may be delayed upto heading stage Apply K upto flowering Application of sufficient FYM and weeding Rainwater harvesting by 30 cm high bunding Top dress with additional quantities of MOP @ 5 kg/bigha & incorporate it Spray 2% KET solution on leaves 	Supply of seeds through national Calamity relief fund in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY
		Sali rice-Boro rice For Sali rice same as above Boro rice: Kanaklata, Chandrama, Bishnu Prasad, IR-68, Local (Rataboro, Kalaboro)	Same as above	Same as above	Same as above
		Sali rice-Ahu rice For Sali rice var. same as CS1 Ahu rice (transplanted):Luit, Disang, Gopinath, Jaya,Krishna, Cauvery, IR-36, IR-50, Ratna, Culture-1, Socket-4 Ahu rice (Direct seeded): Koimurali, Luit	Same as CS1	Same as CS1	Same as CS1
	Rainfed medium land	Sali rice-Oilseeds/pulses For Sali rice var. same as rainfed lowland situation Oilseeds: Rapeseed:M-27, TS-36, TS-38, TS-29, Linseed:T-397 & Local var, Sesamum: Madaavi, Gouri,	 Life saving irrigation Integrated weed Management Direct seeding of short duration late Sali var (Luit, Disang etc) Divert some area from paddy to pulses & oilseeds 	1.Top dressing of N, P & K top dressing in the line sown crops, Apply P upto 3 weeks after seeding & K upto flowering 2. Application of	Supply of seeds through national Calamity relief fund in time. Procurement of certified seeds from ASC Ltd &

Vinayak, Punjab tall No.1, RT- 1& Local var, Pulses: Rajmah (Local, Uday, PDR-14) Pea: (Azad P-1, T-163, Boneville), Blackgram (Local, T-9, T-27, KU-309)		sufficient FYM and weeding 3. Rainwater harvesting by 30 cm high bunding 4. For Sali rice, top dress with additional quantities of MOP @ 5 kg/bigha & incorporate it 5. Spray 2% KET solution on leaves 6.Ridge and furrow cultivation of Rajmah 7.Zero tillage for toria and mulching	RARS, AAU. Supply of water pumps, STW,LLP under RKVY
Sali rice-winter vegetables For Sali rice var same as rainfed lowland situation Winter vegetables: Cabbage (Drum head, Pride of India, Golden acre) Cauliflower (Snowball-16,Pusa snowball, Pusa Deepali Tomato(Arka Alok, Surakha hybrid, Pusa Ruby), Brinjal(JC-1), Pusa Purple round, Pusa Purple long, Pusa Kranti, Chilli (Pusa Jwala, Krishna), Coriander (UP- 41,Pusa 860, Spinach(All Green, Pusa Jyoti, local Dolichos bean(Pusa Early Profile, HD-18) Potato(Kufri Chandramukhi, Kufri Jyoti, Kufri Sindhuri), pumpkin(Local), Cowpea (Pusa Barsati, Local)	For Sali rice same as above Divert some area from paddy to early winter vegetables	For Sali rice same as above Ridge and furrow cultivation of vegetables	Same as above
Sali rice- Ahu rice	Same as rainfed low land situation for both Sali and Ahu	Same as rainfed low land situation for both	Same as rainfed low land situation

Rainfed up land	For Sali rice var same as rainfed lowland situation Ahu rice (transplanted):Luit, Disang, Gopinath, Jaya,Krishna, Cauvery, IR-36, IR-50, Ratna, Culture-1, Socket-4 Ahu rice (Direct seeded): Koimurali, Luit Summer & Kharif vegetables-	1.Thining and gap filling the	Sali and Ahu 1.Application of	for both Sali and Ahu Supply of seeds
	rabi vegetables Summer & Kharif vegetables: Brinjal JC-1, Pusa Purple round, Pusa Purple long, Pusa Kranti, Snakegourd (Long green, Long white, Extra long, local) Okra (Prabhani Kranti, Pusa Sawani, Arka Anamika, local), Ridge gourd(Pusa Nasdar, AAUJ-2, AAUJ-3, local),Bottlegourd(Pusa Summer Prolific Long, Pusa Summer Prolific round,Bittergourd (Pusa do Mausmi, Long green, Extra long, Coimbatore long, Long green monsoon),Cucumber (Chinese green, Pusa sanyog, Poinsette,AAUC-1, AAUC-2, AAUC-3, AAUC-4, Winter Vegetables: Var same as Rainfed Medium land situation	existing crop 2. Re-sowing with short duration varieties 3.Integrated Weed Management 4. Divert some area for early winter vegetables	sufficient amount of organic manure- vermicompost, FYM etc 2.Rainwater harvesting 3.Ridge and furrow cultivation 4. Apply N as top dress. P & K also top dress if not applied as basal in line sown crop 5. P should be applied upto 3 weeks after seeding and K upto flowering	through national Calamity relief fund in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY

Condition			Suggested Contingency measures		
Terminal drought (Early withdrawal of monsoon)	Major Farming situation ^a	Normal Crop/cropping system ^b	Crop management ^c	Rabi Crop planning ^d	Remarks on Implementation ^e

1) Rainfe	ed lowland Sali mono crop Sali rice : High Yielding Variety Ranjit, Bahadur, Pankaj,Kushal, Moniram, Local bao paddy, Scented rice: Badsahbhog	 Life saving irrigation Harvest at physiological maturity stage 	Winter vegetables, Pulses, early ahu	Supply of seeds through national Calamity relief fund in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY
	Sali rice-Boro rice For Sali rice same as above Boro rice: Kanaklata, Chandrama, Bishnu Prasad, IR-68, Local (Rataboro, Kalaboro)	Same as CS1 for Sali rice, Timely land preparation & sowing of boro rice	Boro rice	Same as CS1
	Sali rice-Ahu rice For Sali rice var. same as CS1 Ahu rice (transplanted):Luit, Disang, Gopinath, Jaya,Krishna, Cauvery, IR-36, IR-50, Ratna, Culture-1, Socket-4 Ahu rice (Direct seeded): Koimurali, Luit	Same as CS1 for Sali rice Divert some <i>Sali</i> area for early <i>ahu</i> Timely land preparation & sowing of <i>ahu</i> rice	Ahu rice	Same as CS1
2) Rainfe land	d medium Sali rice-Oilseeds/pulses For Sali rice var. same as rainfed lowland situation Oilseeds: Rapeseed:M-27, TS-36, TS-38, TS-29, Linseed:T-397 & Local var, Sesamum: Madaavi, Gouri, Vinayak, Punjab tall No.1, RT-	 Life saving irrigation Ridge and furrow cultivation of Rajmah Harvesting of <i>Sali</i> rice at physiological maturity stage Divert some area from paddy to pulses & oilseeds 	Oilseed and pulses	Supply of seeds through national Calamity relief fund in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP

1& Local var, Pulses: Rajmah			under RKVY
(Local, Uday, PDR-14) Pea:			
(Azad P-1, T-163, Boneville),			
Blackgram (Local, T-9, T-27,			
KU-309)			
Sali rice-winter vegetables For Sali rice var same as rainfed lowland situation Winter vegetables: Cabbage (Drum head, Pride of India, Golden acre) Cauliflower (Snowball- 16,Pusa snowball, Pusa Deepali Tomato(Arka Alok, Surakha hybrid, Pusa Ruby), Brinjal(JC-1), Pusa Ruby), Brinjal(JC-1), Pusa Purple round, Pusa Purple long, Pusa Kranti, Chilli (Pusa Jwala, Krishna), Coriander (UP- 41,Pusa 860, Spinach(All Green, Pusa Jyoti, local Dolichos bean(Pusa Early Profile, HD-18) Potato(Kufri Chandramukhi, Kufri Jyoti, Kufri Sindhuri), pumpkin(Local), Cowpea (Pusa Barsati, Local)	 Life saving irrigation Ridge and furrow cultivation of Rajmah Harvesting of <i>Sali</i> rice at physiological maturity stage Divert some area from paddy to pulses & oilseeds 	Winter vegetables	Supply of seeds through national Calamity relief fund in time. Procurement of certified seeds from ASC Ltd & RARS, AAU. Supply of water pumps, STW,LLP under RKVY
Sali rice- Ahu rice	Same as rainfed low land	Ahu rice	Same as rainfed
For Sali rice var same as rainfed lowland situation Ahu rice (transplanted):Luit,	situation for both Sali and Ahu		low land situation for both Sali and Ahu
Disang, Gopinath,			
Jaya,Krishna, Cauvery, IR-36,			
IR-50, Ratna, Culture-1,			

50	ocket-4			
Ah	hu rice (Direct seeded):			
Ko	oimurali, Luit			
Rainfed uplandSuVegPutlon(Lolon(LoKraAnPutSu3, 1Su<	oimurali, Luit ummer & Kharif egetables-rabi vegetables ummer & Kharif egetables: Brinjal JC-1, Pusa urple round, Pusa Purple ong, Pusa Kranti, Snakegourd ong green, Long white, Extra ong, local) Okra (Prabhani ranti, Pusa Sawani, Arka namika, local), Ridge gourd(usa Nasdar, AAUJ-2, AAUJ- local),Bottlegourd(Pusa ummer Prolific Long, Pusa ummer Prolific bund,Bittergourd (Pusa do lausmi, Long green, Extra ong, Coimbatore long, Long reen monsoon),Cucumber (hinese green, Pusa sanyog, oinsette,AAUC-1, AAUC-2, AUC-3, AAUC-4, Vinter Vegetables: ar same as Rainfed Medium nd situation	 Life saving irrigation Timely land preparation and sowing of early winter vegetables Divert some area for early winter vegetables Application of sufficient amount of organic manure- vermicompost, FYM etc Harvest at physiological maturity stage 	Early winter vegetables, normal winter vegetables	Same as rainfed low land situation for both Sali and Ahu

2.1.2 Drought - Irrigated situation: Not applicable

Condition		Suggested Contingency measures			
	Major Farming situation ^f	Normal Crop/cropping system ^g	Change in crop/cropping system ^h	Agronomic measures ⁱ	Remarks on Implementation ^j
Delayed release of w	vater in canals due to lo	w rainfall			
Limited release of					
water in canals due					
to low rainfall					

Condition			Suggested Contingency measures		
	Major Farming situation ^f	Normal Crop/cropping system ^g	Change in crop/cropping system ^h	Agronomic measures ⁱ	Remarks on Implementation ^j
Non release of water in canals under delayed					
onset of monsoon in catchment					
Lack of inflows into tanks due to insufficient /delayed onset of monsoon					
Insufficient groundwater recharge due to low rainfall					

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

Condition	Suggested contingency measure					
Continuous high rainfall in a short span leading to water logging	Vegetative stage ^k	Flowering stage ¹	Crop maturity stage ^m	Post harvest ⁿ		
Paddy	Provide drainage, Gap filling in damaged patches if seedlings are available,Top dressing of urea after the recess of rains	Provide drainage, Provide necessary control measures against outbreak of caseworm, gandhi bug and stem borer.	Drain out the water,Harvesting at physiological maturity stage	Shift to safer place Dry in shade in a well ventilated space to optimum moisture level, Seed treatment with fungicide against insects & diseases		
Rajmah	Provide drainage Re-sowing of short duration late variety.	Provide drainage	Drain out Harvesting at physiological maturity stage and Harvest of <i>rajmah</i> for vegetable purpose, Use as fodder	Shift to safe place. Dry in shade and turn frequently, sale the produce		

Potato	Provide drainage	Provide drainage	Drain out excess water	Dry in shade,Safe storage against
10000	Take protective measures against late blight of potato.	Take protective measures against late blight of potato.	Harvest at physiological maturity stage	storage pests and diseases (seed treatment with fungicide
Toria	Provide drainage, Re-sowing of	Provide drainage, Take	Drain out excess water	Dry in shade.
	short duration late variety, use as leafy vegetable	protective measures against aphids.	Harvest at physiological maturity stage	Safe storage against storage pests and diseases
Pea	Provide drainage Resowing of short duration late variety.	Provide drainage	Drain out excess water,Harvest for vegetable purpose,Use as animal fodder	Dry in shade and turn frequently. Safe storage against storage pest and disease
Horticulture				
Kharif vegetables	Provide drainage,Re-sowing of short duration late variety,Need based protective measures against pests and diseases.	Provide drainage	Drain out,Harvesting at physiological maturity stage, Use as fodder	Segregation of infested vegetables & destruction Use as fodder
Winter vegetables	Provide drainage,Re-sowing of	Provide drainage	Drain out, Harvesting at	Segregation of infested vegetables &
C	short duration late variety, Need based protective measures against pests and diseases.	Need based protective measures against pests and diseases.	physiological maturity stage, Use as animal feed	destruction Use as animal feed
Chilli	Provide drainage	Provide drainage	Drain out	Segregation of infested vegetables &
	Re-sowing of short duration late	Need based protective	Harvesting at physiological	destruction
	variety,Need based protective measures against pests and diseases.	measures against pests and diseases.	maturity stage Harvest for processing	Dry in well ventilated space.
Heavy rainfall with high speed winds in a short span ²			NA	
Outbreak of pests and diseases due to unseasonal rains				
Paddy	Application of chlorpyriphos or Monocrotophos against hispa, stem borer and case worm	Application of chlorpyriphos or Monocrotophos against case worm, Adopt ITK measures		Safe storage against storage pest and diseases

Rajmah	Rough out infested plants, Application of dimethoate or malathion against aphids, jassids & beetles.	Application of dimethoate or malathion against aphids, jassids & beetles.		Safe storage against storage pest and diseases
Potato	Application of metaxyl alternating with mancozeb for late blight of potato Application of MOC to reduce infestation of red & white ants.	Application of metaxyl alternating with mancozeb for late blight of potato		Safe storage against storage pest and diseases
Toria	Application of chlorpyriphos against insect-pests	Application of chlorpyriphos against insect-pests		Safe storage against storage pest and diseases
Pea	Application of dichlorovos 100 EC or malathion 50 EC against pod borer, leaf miner and aphids. Spray wettable sulphur or tridemorph or dinocap for powder mildew.	Application of dichlorovos 100 EC or malathion 50 EC against pod borer, leaf miner and aphids. Spray wettable sulphur or tridemorph or dinocap for powder mildew.		Safe storage against storage pest and diseases
Horticulture				
Kharif vegetables	Spray malathion 50 EC against fruit fly, malathion 5% dust for cut worm, and 1% Bordeaux mixture against downy mildew and Bavistin 0.1% against powdery mildew.	Spray malathion 50 EC against fruit fly, malathion 5% dust for cut worm, and 1% Bordeaux mixture against downy mildew and Bavistin 0.1% against powdery mildew.	Use as fodder	Segregation of infested vegetables & destruction Use as fodder
Winter vegetables	Spray malathion 50 EC against caterpillar and fruit and shoot borer, malathion 5% dust for cut worm. Application of metaxyl alternating with mancozeb against late blight o tomato	Spray malathion 50 EC against caterpillar, malathion 5% dust for cut worm, Application of metaxyl alternating with mancozeb against late blight o tomato		Segregation of infested vegetables & destruction Use as animal feed
Chilli		Spray captan 50 WP against fruit or anthracnose disease		Segregation of infested vegetables & destruction

2.3 Floods

Condition		Suggested continge	ency measure ^o	
Transient water logging/ partial inundation ¹	Seedling / nursery stage	Vegetative stage	Reproductive stage	At harvest
Paddy	Seed bed preparation in raised bed, Drainage of the Nursery bed	 In partially damaged field. gap filling may be done by redistributing the tillers Plant protection measures Drawing of rope through the crop to prevent from dislodging of mud, Top dressing with MOP, Drainage of excess water. Apply 50% N + 50% K₂O as top dressing during the tillering stage. Wet seeding of sprouted seeds (@75-80 kg/ha) Andrewsali and Monoharsali If transplanting is not possible before mid September, then early varieties such as Sonamukhi, Luit, Culture 1, Chandmoni may be grown as direct seeded rice. Closure planting to check late tillers in case of late planting. 	 urea and MOP @ 15kg/ha Drainage of excess water. emphasis should be given on forthcoming rabi crops. Utilization of residual soil moisture for growing pulses and oilseeds Growing of 	 Early harvest & Proper drying before storage Drainage of excess water, emphasis should be given on forthcoming rabi crops Supply of seeds and other agro-inputs of <i>rabi</i> crops at subsidized rate, provision of bank loan etc. Cultivation of boro rice
Kharif vegetables	Seed bed preparation in raised bed Re sowing	Drainage facility to be provided for quick drainage of water Top dressing with urea after water recedes	Improved drainage Plant protection measures	Early harvesting

Winter vegetables	NA			1
Chilli	NA			
Continuous submergence for more than 2 days ²				
Paddy	Provide drainage facilities, re - sowing	 Drawing of rope through the crop to prevent from dislodging of mud Plant protection measures to be adopted Top dressing with MOP Gap filling 	urea and MOP @ 15kg/ha • Growing of	 Proper drying before storage Supply of seeds and other agro-inputs of <i>rabi</i> crops at subsidized rate, provision of
Rajmah	Re-sowing	Provide drainage Resowing of late varieties Use as fodder	Harvest for vegetable purpose Use as fodder	Harvest and dry in shade, Seed treatment against chemicals
Potato	Re-sowing	Provide drainage Resowing of late varieties	Provide drainage	Harvest and dry in shade as soon as possible,Treat the seeds to protect from stored pest & diseases
Toria	Re-sowing	Provide drainage Resowing of late varieties	Provide drainage Use as fodder	Harvest and dry in shade as soon as poss
Pea	Re-sowing	Provide drainage,Re-sowing of late varieties	Provide drainage,Use as fodder	Harvest and dry till optimum storage moisture level, Seed treatment to prevent seed borne insect pest
Horticulture				
Kharif vegetables	Seed bed preparation in raised bed, Re sowing	 Drainage facility to be provided for quick drainage of water, Top dressing with urea 	 Improved drainage Plant protection measures Top dressing with 	• Early harvest

		after water recedes	urea	
		Plant protection		
		measures		
Winter vegetables				
Chilli	NA			
Sea water intrusion ³	NA			

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

Extreme event type		Suggested continger	ncy measure ^r	
	Seedling / nursery stage	Vegetative stage	Reproductive stage	At harvest
Heat Wave ^p	Not experienced		•	
Cold wave ^q	Not experienced			
Frost	Not experienced			
Hailstorm				
Paddy (Feb. – March)	Short duration variety like Luit, Dishang should be grown	Damage negligible, nothing to do	Damage negligible, nothing to do	Proper drying, emphasis should be given to rabi vegetables
Rajmah	Re-sowing	Damage negligible, nothing to do	Damage negligible, nothing to do	NA
Potato	Re-sowing	Damage negligible, nothing to do	Damage negligible, nothing to do	NA
Toria	Re-sowing	Damage negligible, nothing to do	Damage negligible, nothing to do	NA
Pea	Re-sowing	Damage negligible, nothing to do	Damage negligible, nothing to do	NA
Horticulture				
Kharif vegetable	Shade net should be provided Re-seeding may be done	Shade net should be provided	Shade net should be provided	
Winter vegetables		NA		
Chilli				
Cyclone	Not experienced			

2.5 Contingent strategies for Livestock, Poultry & Fisheries

2.5.1 Livestock

	Suggested contingency measures		
	Before the event ^s	During the event	After the event
Drought			
Feed and fodder availability	Insurance of animals Stock of rice polish, wheat bran, green and dry fodder Fodder cultivation in large scale Storage of fodder in the form of silage and hay	Utilization of perennial fodder Utilization of fodder as silage and hay Transportation of fodder from nearby area Use of feed mixtures	Training of farmers on feed and fodder storage Maintenance and repair of silo pits, feed and fodder store
Drinking water	Construction of water reservoir and preservation for drinking purpose Excavation of bore well	Utilization of stored water for drinking	Proper management of reservoirs For future use if and when required
Health and disease management	Stocking of sufficient medicine and vaccines	Treatment camps and treatment of diseased animal	Culling of weak and sick animals Treatment camps and treatment of diseased animal
Floods			
Feed and fodder availability	Insurance of animals Stock of rice polish, wheat bran, green and dry fodder Fodder cultivation in large scale in upland areas Storage of fodder in the form of silage and hay	Utilization of perennial fodder Utilization of fodder as silage and hay Transportation of fodder from nearby area Use of feed mixtures	Claiming of insurance Culling of unproductive animals
Drinking water	Construction of water reservoir in higher upland areas and preservation for drinking purpose Excavation of bore well	Utilization of stored water after proper treatment for drinking	Proper management of reservoirs For future use if and when required

Health and disease management			Vaccination and treatment of
	Stocking of sufficient medicine and vaccines	Treatment camps and treatment of diseased	animals
		animal	Culling of weak and sick animals
Cyclone	No Cyclone affected district		
Heat wave and cold wave			

2.5.2 Poultry

	Suggested contingency measures			Convergence/linkages with ongoing programs, if any
	Before the event ^a	During the event	After the event	
Drought				
	Insurance and stocking of	Utilization of reserved	Availing insurance and	
Shortage of feed ingredients	feed ingredients	feed	strengthening feed	ATMA
			reserve	
	Construction of water	Utilization of stored	Proper management of	
	reservoir and reservation for	water after proper	reservoirs	
Drinking water	drinking purpose	treatment for drinking	For future use if and	
	Excavation of bore well		when required	
	Stocking of sufficient	Treatment camps, mass	Culling of affected birds	
	-	vaccination and	Disposal of dead birds	
Health and disease management	medicine and vaccines for	treatment of diseased	by burning/burying with	
	utilization during flood	animal	lime powder/salting	
Floods				
	Insurance and stocking of	Utilization of reserved	Availing insurance and	
Shortage of feed ingredients	feed ingredients	feed	strengthening feed	
			reserve.	
Drinking water	Construction of water	Utilization of stored	Proper management of	
	reservoir in elevated areas	water after proper	reservoirs	

	and preservation for drinking	treatment for drinking	For future use if and	
	purpose		when required	
	Excavation of bore well			
	Stocking of sufficient	Treatment camps, mass	Culling of affected birds	
Health and disease management	medicine and vaccines for	vaccination and	Disposal of dead birds	
	utilization during flood.	treatment of diseased	by burning/burying with	
		animal	lime powder/salting	
Cyclone	No Cyclone affected district			
Heat wave and cold wave				

2.5.3 Fisheries/ Aquaculture

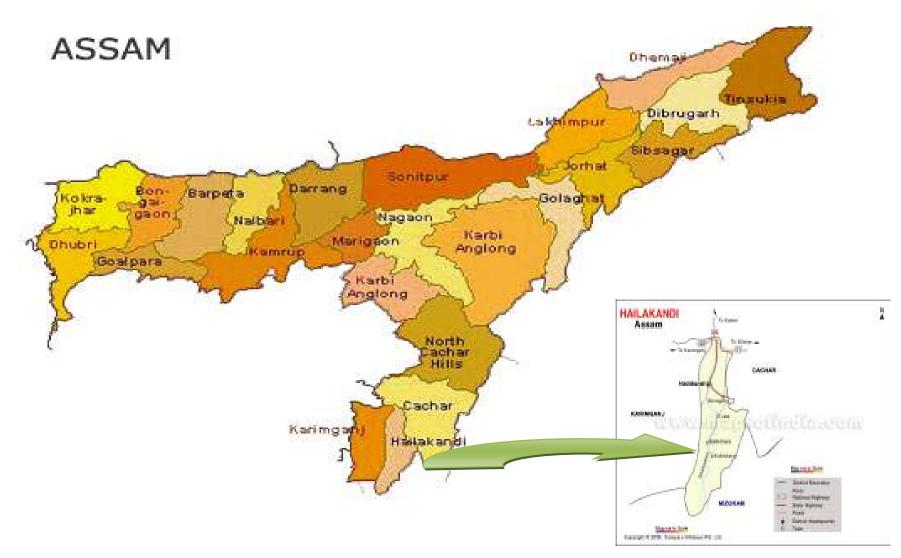
	Suggested contingency measures		
	Before the event ^a	During the event	After the event
1) Drought			
A. Capture			
B. Aquaculture			
(i) Shallow water in ponds due to insufficient rains/inflow	Insurance of fish and fish pond Storage of water. Conservation of rivers/reservoir/ponds. Re-excavation of local canals and reservoirs.	Use stored water. Use surface water flow. Divert water from unutilized areas.	Need based monitoring through possible measures. Construction of water reservoirs. Construction of Jal kund for rain water harvesting. Compensation claims. Prepare vulnerability map and place it to management committee.
(ii) Impact of salt load build up in ponds / change in water quality	Prohibit dumping of solid and liquid waste in water sources. Stocking of chemicals, disinfectants and therapeutic drugs.	Use disinfectants and therapeutic drugs. Adoption of bio-remedial measures	Water quality analysis and adoption of possible remedial measures Need based research data should be generated on water quality. Dumping of solid and liquid waste should be stopped through enactment of legislation.

(iii) Any other			
2) Floods			
A. Capture			
B. Aquaculture			
(i) Inundation with flood water	Proper construction and maintenance	Arrangement for evacuation.	Rehabilitation, training and awareness
	of ponds for stock safety.	Restoration of essential services,	Reallocation of fish to maintain
	Development of flood control	security and protection of	appropriate biomass.
	management plan.	property.	Adoption of suitable measures to
	Preparedness with emergency backup	Coordination of assistance.	maintain the dissolve oxygen level.
	equipment on site.	Damage and need assessment.	Strengthening of water bodies/ponds.
	Stock insurance.	Immediate management of relief	Loss assessment & insurance claim.
	Adoption of preventive measures	supplies.	
	against entry of alien/wild organisms	Release excess water from fishery	
	through flood water.	unit	
(ii) Water contamination and changes	Store chemicals, disinfectants and	Draining of contaminated water.	Maintain water quality, need based
in water quality	therapeutic drugs	Improve water quality through	research.
	Develop flood control management	emergency aeration.	Prompt adoption of remedial
	plan	Use of disinfectants, chemicals	measures for cleaning of water
		and therapeutic drugs for purifying	bodies.
		water.	Regular monitoring of water bodies
		Need based bioremediation.	for formulation of management plan.
(iii) Health and diseases	Advance planning and preparedness.	Identification of diseases.	Laboratory diagnosis of diseased fish,
	Storage of chemicals, disinfectants and	Immediate treatment of disease	generation of data about type or kind
	therapeutic drugs.	infected fish.	of disease spread.
		Use appropriate amount of	Surveillance and monitoring.
		disinfectants, chemicals and	Proper disposal of dead fish.
		therapeutic drugs.	Loss assessment & insurance claim.

		Determination of materia and an est	
		Determination of nature and speed	
		of transmission of diseases.	
		Emergency aeration or splashing	
		in water bodies.	
(iv) Loss of stock and inputs (feed,	Keep the stock/input at safe place for	Search/locate the stock/input.	Strengthening of stocks.
chemicals etc)	emergency purpose.	Purchase/hire valuable	Assessment of total loss.
	Develop flood control management	stock/inputs from distant areas not	Insurance claims.
	plan.	affected by flood.	
	Stock material insurance.		
(v) Infrastructure damage (pumps,	Educate and provide training for the	Notify utilities of the critical	Damaged infrastructure enumeration
aerators, huts etc)	repair of infrastructure.	demand.	and need assessment.
	Store raw materials for repairing of	ii)Coordination of assistance.	Locate backup equipment and verify
	pumps aerators, huts etc.	Immediate management of relief	its operation.
	Infrastructure insurance.	supplies.	Repair of damaged infrastructure.
			Loss assessment & insurance claim.
(vi) Any other			
3. Cyclone / Tsunami	Not a Cyclone affected district		
A. Capture			
B. Aquaculture			
4. Heat wave and cold wave			
A. Capture			
B . Aquaculture			

Annexure I

Location map of district within State



Annexure 2

Mean annual rainfall of Hailakandi 2008

