State: MANIPUR
Agriculture Contingency Plan for District: IMPHAL EAST

1.0 District Agriculture Profile

1.1	**Agro-Climatic/Ecological Zone**			
	Agro Ecological Sub Region (ICAR)	North-Eastern Hills (Purvachal), Warm Perhumid Eco-sub region (17.2)		
	Agro-climatic Region (Planning Commission)	Eastern Himalayan Region (II)		
	Agro Climatic Zone (NARP)	Sub-Tropical Zone (NEH-4)		
	List all the districts or part thereof falling under the NARP Zone	Manipur -Imphal, Thoubal, Bishnupur, Senapati, Churachandpur, Ukhrul, Tamenglong, Chandel, Howrah, Midnapore		
	Geographic coordinates of district	Latitude	Longitude	Altitude
		23°50' N-25°41' N	93°2'E-94°47'E	790mls
	Name and address of the concerned ZRS/ ZARS/ RARS/ RRS/ RRTTS	-		
	Mention the KVK located in the district	Leitanpekpham, Andro		

1.2	**Rainfall**	**Normal RF (mm)**	**Normal Rainy days**	**Normal Onset (specify week and month)**	**Normal Cessation (specify week and month)**
	SW monsoon (June-Sep)	720.67	55	1st week of June	4th week of September
	NE Monsoon (Oct-Dec)	181.67	15	1st week of October	4th week of December
	Winter (Jan-March)	61.00	9	-	-
	Summer (Apr-May)	408.90	21	-	-
	Annual	1372.23	100	-	-

1.3	**Land use pattern of the district (latest statistics)**	**Geographic area**	**Forest area**	**Land under agril use**	**Permanent pastures**	**Cultivable waste land**	**Land under Misc tree crops and groves**	**Barren and uncultivable land**	**Current fallows**	**Other fallows**
		71.0	2.2	33.4	5.1	33.9	0.32	032	-	-

1.4	**Major Soils (common names like shallow red soils etc.)**		**Area ('000 ha)**	**Per cent of total**
	Clayed loam Soil		-	70
	Sandy loam Soil		-	27
	Red Soil		-	3
1.5	**Agricultural land use**		**Area ('000 ha)**	**Cropping intensity %**
	Net sown area		35.53	-
	Area under more than once		6.84	-
	Gross cropped area		42.37	112.14
1.6	**Irrigation**		**Area ('000 ha)**	
	Net irrigated area		6.86	-
	Gross irrigated area		-	-
	Rainfed area		19.59	-
	Sources of Irrigation	**Number**	**Area (ha)**	**% of total irrigated area**
	Canal	-	-	-
	Tanks	8	160	7.47
	Open wells	-	-	-
	Bore wells	-	-	-
	Lift irrigation	27	580	27.10
	Micro-irrigation	-	-	-
	Other sources	25	1400	65.42
	Total Irrigated Area	60	2140	-
	Pump sets	2993	-	-
	No. of Tractors	145	-	-
	Ground water availability and use (Data source: State/Central Ground water Department/ Board)		**No of blocks/Tehsils**	**% area**
	Over exploited		3	100
	Critical		-	-
	Semi-critical		-	-
	Safe		-	-
	Wastewater availability and use		-	-
	Ground water quality		-	-

1.7 Area under major field crops & horticulture etc

1.7	Major Field Crops cultivated	Area ('000 ha)					
		Kharif		Rabi		Summer	Total
		Irrigated	Rainfed	Irrigated	Rainfed		
	Paddy	-	33.4	-	-	-	33.4
	Maize	-	0.75	-	-	-	0.75
	Pulses (Pea)	-	-	-	2.95	-	2.95
	Oilseed(Rapeseed & Mustard)	-	-	-	3.74	-	3.74
	Potato	-	-	-	0.79	-	0.79
	Horticulture crops-Fruits	**Total area(ha)**		**Irrigated**		**Rainfed**	
	Pineapple	1035		-		1035	
	Banana	385		-		385	
	Lemon	80		-		80	
	Papaya	256		-		256	
	Guava	38		-		38	
	Horticultural crops-Vegetables	**Total area(ha)**		**Irrigated**		**Rainfed**	
	Cauliflower	415		415		-	
	Cabbage	650		650		-	
	Tomato	415		-		415	
	Pea	568		-		568	
	Others	606		-		606	
	Medicinal and Aromatic crops	**Total area**		**Irrigated**		**Rainfed**	
		-		-		-	
	Plantation crops	**Total area (ha)**		**Irrigated**		**Rainfed**	
	Sugarcane	520		-		520	
	Fodder crops	**Total area(ha)**		**Irrigated**		**Rainfed**	
	Fodder Maize	10		-		10	

	Oats	3	1	2
	Berseem	1	0.25	-
	Lucern	0.25	0.25	-
	Fodder bajra	0.25	0.25	-
	Total fodder crop area	15	-	-
	Grazing land	60	-	-
	Sericulture etc			
	Mulburry	-	-	943.9
	Iri	-	-	376.66
	Tasar	-	-	459.0
	Muga	-	-	211.0
	Total	-	-	**2000.56**
	Others (specify)			

1.8	**Livestock**	**Male ('000)**	**Female ('000)**	**Total ('000)**
	Non descriptive Cattle (local low yielding)	20.0	22.66	42.86
	Crossbred cattle	1.34	5.29	6.64
	Non descriptive Buffaloes (local low yielding)	0.70	0.83	1.54
	Graded Buffaloes	-	-	-
	Goat	3.82	5.56	9.38
	Sheep	0.15	0.29	0.45
	Others (Camel, Pig, Yak etc)	12.14	11.70	23.85
	Commercial dairy farms (number)			2

1.9	**Poultry**	**No. of farm**	**Total No. of birds ('000)**	
	Commercial	3.01	602.60	
	Backyard	Massive	212.04	
	Fisheries (Data source : Chief Planning Officer)			
	A. Capture			
		No. of fishermen	**Boats**	**Nets** / Storage facilities (Ice plants etc)
	i) Marine (Data source: Fisheries Department)			
	ii) Inland (Data source: Fisheries Department)			
	B. Culture	Water Spread Area (ha)	Yield (t/ha)	Production ('000 tons)
	i) Brackish water (Data source: MPEDA/ Fisheries Dept)			

	ii) Fresh water (Data source: Fisheries Dept)	56.9	1.2	0.068
	Others			

1.11 Production and productivity of major crops

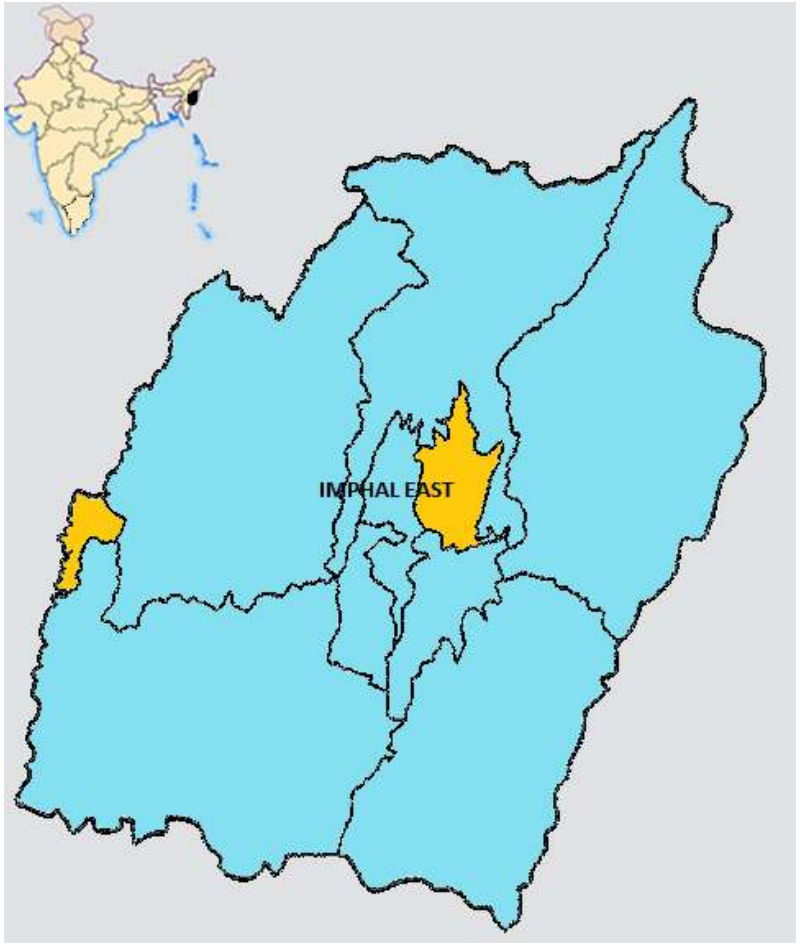
1.11	Name of the crop	Kharif		Rabi		Summer		Total	
		Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)
Major Field crops									
	Paddy	104.94	5700	-	-	0.32	2160	105.26	3930
	Maize	0.90	1690	-	-	-	-	0.90	1690
	Pulses	0.48	1170	1.82	730	-	-	2.30	950
	Oilseed	0.60	780	2.16	880	-	-	2.76	830
	Potato	-	-	3.58	7680	-	-	3.58	7680
	Wheat	-	-	0.56	2460	-	-	0.56	2460
	Sugarcane	22.56	59180	-	-	-	-	22.56	59180
Major Horticultural crops									
	Pineapple	8733.6	8480	-	-	-	-	8733.6	8480
	Banana	3336.8	1110	-	-	-	-	3336.8	1110
	Lemon	496.0	6380	-	-	-	-	496.0	6380
	Papaya	1249.0	4900					1249.0	4900
	Guava	119.0	3100					119.0	3100

1.12	Sowing window for 5 major crops (start and end of sowing period)	Paddy	Maize	Pea	Rapeseed	Potato
	Kharif- Rainfed	1st week of May- 4th week of July	March- May			
	Kharif- Irrigated					
	Rabi-rainfed			3rd week October- 2nd week of November	1st week of October- 4th week of November	1st week of October – 2nd week of December
	Rabi- Irrigated	-	-	-	-	-

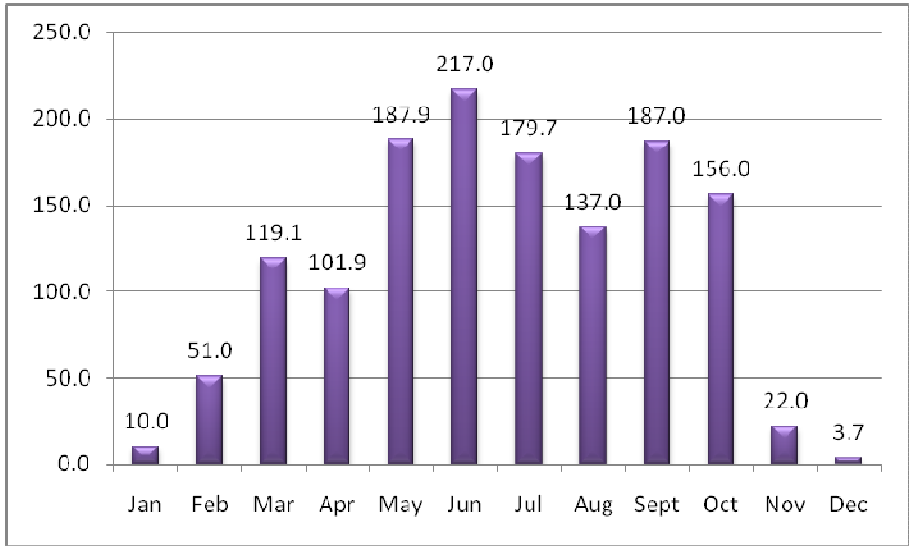
1.13	**What is the major contingency the district is prone to? (Tick mark** and mention years if known during the last 10 year period)	**Regular**	**Occassional**	**None**
	Drought		√	
	Flood			√
	Cyclone			√
	Hail storm		√	
	Heat wave			√
	Cold wave			√
	Frost			√
	Sea water intrusion			√
	Pests and diseases others (BPH, Gallmidge, stem borer, leaf folder)		√	

1.14	**Include Digital maps of the district for**	Local map of district within State as Annexure 1	Enclosed : Yes
		Mean annual rainfall as Annexure 2	Enclosed : Yes
		Soil map as Annexure 3	Enclosed : No

Annexure I



Annexure II



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**	**Crop/cropping system**	**Change in crop/ cropping system**	**Agronomic measures**	**Remarks on implementation**

Delay by 2 weeks (June 3rd week)	AES-I : Sub-tropical middle high land	Paddy/ Paddy-Rapeseed mustard/ Pea Blackgram – Rabi vegetable Blackgram/Soybean – Rabi oilseed/pulses/ vegetables Paddy – Potato/Watermelon/ bottlegourd/pumpkin	No change	-	-
Delay by 4 weeks (July 1st week)			No change	Direct sowing of rice, ploughing the field in advance (during April - May)	
Delay by 6 weeks (July 3rd week)			Paddy – Potato Paddy – Vegetables Greengram /Blackgram/ Soybean/ Groundnut – Rabi oilseed/pulses/vegetables	Dapog nursery, Direct sowing of rice	
Delay by 8 weeks (August 1st week)			Paddy – Monocrop Paddy – Watermelon/ bottlegorud/ pumpkin/vegetables Blackgram/Rabi oilseed & pulses/ vegetables	Direct sowing of short duration rice varieties Dapog nursery Drought continued in Manipur during 2009 upto 1st week of November, under such situation, rabi crops like field pea, wheat, lentil, lathyrus etc. followed by pre-kharif oilseed & pulses may be taken up.	

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**
Delay by 2 weeks (June 3rd week)	AES-II : Sub-tropical low lying	Paddy / Paddy – Rapeseed mustard	No change Ring bundh model, Paddy in main field suitable kharif oilseed & pulses or other vegetables on the bundhs, fish in the trench	Direct sowing of rice, ploughing the field in advance (during April - May)	
Delay by 4 weeks (July 1st week)				Dapog nursery, Direct sowing of rice	
Delay by 6 weeks (July 3rd week)				Direct sowing of short duration paddy varieties	
Delay by 8 weeks (August 1st week)					

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**
Delay by 2 weeks (June 3rd week)	AES-III : Sub-tropical hilly terrain	Kharif crops (soybean, blackgram, groundnut, cassava, sweet potato, longbean, ricebean, frenchbean, kidneybean, mung); rabi crops (potato, pea, pumpkin, bottlegourd, colocassia, yam)	Prefer short duration varieties in different crops for example Soybean: JS-335, Local		
Delay by 4 weeks (July 1st week)					
Delay by 6 weeks (July 3rd week)					
Delay by 8 weeks (August 1st week)			Plan for early rabi crops with pulses (Blackgram) or vegetables		

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**
Normal onset followed by 15-20 days dry spell after sowing leading to poor germination / crop stand etc	AES-I : Sub-tropical middle high land	Paddy/ Paddy-Rapeseed mustard/ Pea Blackgram – Rabi vegetable Blackgram/Soybean – Rabi oilseed/pulses/ vegetables Paddy – Potato/Watermelon/ bottlegourd/pumpkin	No Change	Direct seeded paddy	
	AES-II : Sub-tropical low lying	Paddy – Monocrop Paddy – Rapeseed mustard	No Change		
	AES-III : Sub-tropical hilly terrain	Kharif crops (soybean, blackgram, groundnut, cassava, sweet potato, longbean, ricebean,	No Change		

		frenchbean, kidneybean, mung); rabi crops (potato, pea, pumpkin, bottlegourd, colocassia, yam)			

Condition			**Suggested Contingency measures**		
Mid season drought (long dry spell, consecutive 2 weeks rainless period (> 2.5 mm)	**Major Farming situation**	**Crop/cropping system**	**Change in crop/ cropping system**	**Agronomic measures**	**Remarks on implementation**
Vegetative stage	AES-I : Sub-tropical middle high land	Paddy/ Paddy-Rapeseed mustard/ Pea Blackgram – Rabi vegetable Blackgram/Soybean – Rabi oilseed/pulses/ vegetables Paddy – Potato/Watermelon/ bottlegourd/pumpkin	No Intervention required	Provide light irrigation if irrigation facility available	
	AES-II : Sub-tropical low lying				
	AES-III : Sub-tropical hilly terrain	Kharif crops (soybean, blackgram, groundnut, cassava, sweet potato, longbean, ricebean, frenchbean, kidneybean, mung); rabi crops (potato, pea, pumpkin, bottlegourd, colocassia, yam)			

Condition			**Suggested Contingency measures**		
Mid season drought (long dry spell)	**Major Farming situation**	**Crop/cropping system**	**Change in crop/ cropping system**	**Agronomic measures**	**Remarks on implementation**
At reproductive stage	AES-I : Sub-tropical middle high land	Paddy/ Paddy-Rapeseed mustard/ Pea Blackgram – Rabi vegetable Blackgram/Soybean – Rabi oilseed/pulses/ vegetables	No intervention required	Not required	

		Paddy – Potato/Watermelon/ bottlegourd/pumpkin			
	AES-II : Sub-tropical low lying	Paddy / Paddy – Rapeseed mustard	No intervention required	Provide light irrigation Top dressing of urea to enhance maturity (or Folair application with 2% urea)	
	AES-III : Sub-tropical hilly terrain	Kharif crops (soybean, blackgram, groundnut, cassava, sweet potato, longbean, ricebean, frenchbean, kidneybean, mung); rabi crops (potato, pea, pumpkin, bottlegourd, colocassia, yam)			

Condition			**Suggested Contingency measures**		
Terminal drought	**Major Farming situation**	**Crop/cropping system**	**Crop management**	**Soil nutrient & moisture conservation measures**	**Remarks on implementation**
	AES-I : Sub-tropical middle high land	Paddy – Monocrop Paddy – Rapeseed mustard Paddy – Pea Blackgram – Rabi vegetable Blackgram/Soybean – Rabi oilseed/pulses/ vegetables Paddy – Potato Paddy – Watermelon/ bottlegourd/pumpkin	Not required	Early Planting of rabi crop	
	AES-II : Sub-tropical low lying	Paddy – Monocrop Paddy – Rapeseed mustard	Not required	Provide light irrigation Top dressing of urea will enhance maturity of crops will lead to higher economical return to farmers	
	AES-III : Sub-tropical hilly terrain	Kharif crops (soybean, blackgram, groundnut, cassava, sweet potato, longbean, ricebean, frenchbean, kidneybean,	Not required	Early Planting of rabi crop	

		mung); rabi crops (potato, pea, pumpkin, bottlegourd, colocassia, yam)			

2.1.2 Irrigated situation

Condition			Suggested Contingency measures		
	Major Farming situation	**Normal crop/ cropping system**	**Change in crop/ cropping system**	**Agronomic measures**	**Remarks on Implementation**
Delayed / limited release of water in canals due to low rainfall	AES-I : Sub-tropical middle high land	Paddy – Monocrop Paddy – Rapeseed mustard Paddy – Pea Blackgram – Rabi vegetable Blackgram/Soybean – Rabi oilseed/pulses/ vegetables Paddy – Potato Paddy – Watermelon/ bottlegourd/pumpkin	Not required	Not required	
	AES-II : Sub-tropical low lying	Paddy – Monocrop Paddy – Rapeseed mustard			
	AES-III : Sub-tropical hilly terrain	Kharif crops (soybean, blackgram, groundnut, cassava, sweet potato, longbean, ricebean, frenchbean, kidneybean, mung); rabi crops (potato, pea, pumpkin, bottlegourd, colocassia, yam)			

2.2 Unusual rains (Untimely, unseasonal etc)

Condition	Suggested contingency measure			
	Vegetative stage	**Flowering stage**	**Crop maturity**	**Post harvest**
Paddy	Drain out excess water, application of pesticides	Drain out excess water, application of pesticides	Early harvesting and shifting of produce to safer place for drying, grading of quality seed	Proper drying, seed treatment and storage
Maize				
Horticulture				

Pineapple	Application of pesticides based on observation of insect pests and disease			Preparation of value added products
Banana				
Cauliflower				
Cabbage				
Tomato				

2.3 Floods

Condition	**Suggested contingency measure**			
	Seedling /nursery stage	**Vegetative stage**	**Reproductive stage**	**At harvest**
Paddy	Drain out excess water, application of proper plant protection measures wherever required on monitoring, resowing in case of complete damage of seedlings	Drain out excess water, application of plant protection chemicals	Drain out excess water, application of plant protection chemicals	Harvesting and immediate shifting of the produce to safer place, proper drying, threshing, grading and seed treatment (for seed purpose)
Maize				
Horticulture				
Cauliflower	Drain out excess water, application of proper plant protection measures wherever required on monitoring, resowing in case of complete damage of seedlings	Drain out excess water, application of plant protection chemicals	Drain out excess water, application of plant protection chemicals	Harvesting, marketing of fresh produce and value addition of the surplus

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

Extreme event type	**Suggested contingency measure**			
Hailstorm/Frost	**Seedling /nursery stage**	**Vegetative stage**	**Reproductive stage**	**At harvest**
Paddy (hailstorm)	Removal of damaged seedlings and resowing	Removal of debris/plant, application of plant protection chemicals, application of appropriate dose of nitrogenous fertilizer for proper growth	Top dressing of potassic fertilizer for improvement of plant health and quality grain production	Drain out water and keep the field complete dry, harvesting and threshing immediately
Maize (hailstorm)				
Pea (hailstorm)				
Rapeseed mustard (hailstorm)				
Potato (hailstorm/frost)	Removal of damaged seedlings, gap filling in early stage, spraying of water before sunrise (in case of			Haulm cutting and harvesting the crop after 10 to 15 days

	frost)			
Horticulture				
Pineapple (hailstrom)	Removal of debris, application of plant protection chemicals	Removal of debris, application of plant protection chemicals	Removal of debris, application of plant protection chemicals	Immediate harvesting, grading and marketing
Banana (frost)	Use of local variety may serve the purpose			
Cauliflower	Removal of debris and resowing, application of plant protection chemicals	Removal of debris, application of plant protection chemicals	Removal of debris, application of plant protection chemicals	Harvesting, marketing of fresh produce and value addition of the surplus

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 and fodder availability	Plantation of fodder and forage for plenty availability, adequate & proper storage of ensilage & racking of hay/dry grasses, grains and other concentrate feed of livestock and poultry.	Straw –urea treatment should be done for enrichment of nutrients, feeding with concentrate @1.4 kg/day/ cow	Use of non-conventional feeds, feeds may be provided Adlibitum.
Drinking water	Proper storage of drinking water. Apply rain harvest technology like plastic lining, preparation of new pond etc.	Purify drinking water by using lime, bleaching powder, alum for controlling turbidity and sedimentation, use hand pump water, water may be treated with B904/SOKRENA/AQUAMAX@ 1ml/10lt. drinking water	Treated water may be provided Adilibitum mixed electrolyte (PRS/ERS), vitamins (BHITA/VIMERAL) and mineral mixture powder. All measures during the event may be followed.
Health and disease management	Regular health check up for stool, urination and other parasitic infestation like schistomanasalis, leech, round worm, flat worm and tape worm. Regular vaccination and timely deworming suggested.	To open mobile animal health clinics area-wise, proper hygienic maintenance of farm house and surroundings. Clean all the farm equipments and utensils regularly. Proper drainage should be made.	Repeated vaccination for healthy one and ill-animals should be treated properly. Fumigation disinfectation of animal house/sty, proper cleaning with medicated water, preventive care to be taken through vaccination, deworming and administration of antibiotics & antiprotozoal drugs.
Flood			

Feed and fodder availability	Plenty plantation of crops, fodder and forage etc. Construction of proper storage room at the site of farm house. Silage making should be done. Storage of feed grains, dry lucern, berseem by making bundles. Chap fodder should be conserved for future use.	Shelter arrangement on highland and to practice highland grazing and browsiness. Use feed grains and ensilage. Optimum use of feed and proper utilization of kitchen wastage for feed purpose.	Immediate arrangement for new plantation of fodder, grain plant, forage etc. to feeds from kitchen wastage. To maintain proper drainage in and around the farm house. Disinfect the farm immediately after the event.
Drinking water	Rain water harvesting technology to be adopted for conservation and saving of water.	Use hand pump or underground water which will be safe for animal health.	Properly treated water should be used in the farm. Clean utensils mainly containers with potassium permanganate.
Health and disease management	Health care is same as drought	Same as drought	Same as drought
Cyclone			
Feed and fodder availability			
Drinking water			
Health and disease management			
Heat wave and cold wave			
Shelter/environment management			
Health and disease management			

2.5.2 Poultry

	Suggested contingency measures		
	Before the event	**During the event**	**After the event**
Drought			
Shortage of feed ingredients	Foraging and scavenging system of rearing, optimum utilization of grain and preserved feed.	To be given mostly non-conventional feed with mineral mixture, additive vitamins and probiotics. Adoption scavenge system of rearing. Utilization of available aquatic weeds from swampy areas. Rice brans and oil cakes may be used as feed supplement.	Immediate plantation of local varieties of feed crops such as jackbean, job's tear, maize etc. Feeding with concentrate feed @145-150 gm./adult bird/day.
Drinking water			Treated water may be provided Adilibitum mixed electrolyte (PRS/ERS), vitamins (BHITA/VIMERAL) and mineral mixture powder. Butyric acid should be mixed with feed for development of digestive tract micro-flora. All measures during the event may be followed.

Health and disease management			
Flood			
Shortage of feed ingredients			
Drinking water			
Health and disease management			
Cyclone	Not applicable		
Shortage of feed ingredients			
Drinking water			
Health and disease management			
Heat wave and cold wave			
Shelter /environment management			
Health and disease management			

2.5.3 Fisheries / Aquaculture	**Suggested contingency measures**		
	Before the event	**During the event**	**After the event**
1. Drought			
A. Capture			
Marine			
Inland			
(i) Shallow water depth due to insufficient rains/ inflow			
(ii) Changes in water quality			
(iii) Any other			
B. Aquaculture			
(i) Shallow water in ponds due to insufficient rains/ inflow	Fill water from available water source maintaining the water level at least 4-5 ft.	Reduce the stocking density, if the situation becomes worse the fish may be harvested immediately.	Pond preparation and management practices is to be taken up for the next crops.
(ii) Impact of salt load build up in ponds/ change in water quality	Applying of lime	Applying of lime	Manuring of pond with organic and inorganic fertilizer.
(iii) Any other			
	Suggested contingency measures		
	Before the event	**During the event**	**After the event**

2. Floods			
A. Aquaculture			
(i) Inundation with flood water	Arrangement of fence with net or bamboo around the dyke/dundh	Providing screen around the dyke	Renovation of bundh, water treatment and manuring and assessment of fish availability in the pond
(ii) Water continuation and changes in water quality	Applying of lime	Applying of lime	Applying of lime
(iii) Health and diseases	Use lime and CIFAX or Lime + Turmaric powder (10:1), infected fish may be treated using KMnO4	Use lime and CIFAX or Lime + Turmaric powder (10:1), infected fish may be treated using KMnO4	Use lime and CIFAX or Lime + Turmaric powder (10:1), infected fish may be treated using KMnO4
(iv) Loss of stock and inputs (feed, chemicals etc)	Not applicable as stocking of inputs not much in practice among the farmers of the district	Not applicable as stocking of inputs not much in practice among the farmers of the district	Not applicable as stocking of inputs not much in practice among the farmers of the district
(v) Infrastructure damage (pumps, aerators, huts etc)	Farm equipment is to be shifted to protected area and farm house is to be vacated.	Farm equipment is to be shifted to protected area and farm house is to be vacated.	Repairing of farm house and installation of farm equipments immediately after disinfecting equipments.
(vi) Any other			