State: TAMILNADU

Agriculture Contingency Plan for District: PUDUKKOTTAI

1.0 District Agriculture profile				
1.1	**Agro-Climatic/Ecological Zone**			
	Agro Ecological Region / Sub Region (ICAR)	Eastern Ghats And TamilNadu Uplands (8.3)		
	Agro-Climatic Region (Planning Commission)	Central plateau of Tamil Nadu (XI)		
	Agro Climatic Zone (NARP)	Cauvery Delta Zone (TN-4) and Southern Zone (TN-5)		
	List all the districts or part thereof falling under the NARP Zone	Ramanathapuram, Tirunelveli, Dindugal, Natham, Melur, Thirumangalam, Madurai, South and North of Madurai district, Pudukkottai district excluding Aranthangi taluk		
	Geographic coordinates of district	Latitude	Longitude	Altitude
		10^0 23' N	78^0 50' E	100 m
	Name and address of the concerned ZRS/ ZARS/ RARS/ RRS/ RRTTS	National Pulses Research Centre, Vamban		
	Mention the KVK located in the district	KVK, Vamban, Vamban Colony, Pudukkottai- 622 303.		

1.2	**Rainfall**	Average (mm)	Normal Onset (specify week and month)	Normal Cessation (specify week and month)
	SW monsoon (June-Sep):	351.9	2nd week of June	1st week of October
	NE Monsoon(Oct-Dec):	394.1	3rd week of October	2nd week of December
	Winter (Jan- Feb)	52.2	-	-
	Summer (Mar-May)	124.6	-	-
	Annual	922.8	-	-

1.3	**Land use pattern of the**	Geographical area ('000 ha)	Forest area	Land under non-	Permanent pastures	Cultivable wasteland	Land under Misc. tree	Barren and uncultivable	Current fallows	Other fallows

	district (latest statistics)			agricultural use			crops and groves	land		
	Area ('000ha)	466.3	23.5	129.8	5.1	10.2	28.4	9.9	16.3	91.4

1. 4	**Major Soils**	Area ('000 ha)	Percent (%) of total
	Black Soils	205.1	44
	Deep Red Soils	139.9	30
	Red Sandy Soils	121.2	26
1.5	**Agricultural land use**	Area ('000 ha)	Cropping intensity %
	Net sown area	156.3	101.4
	Area sown more than once	2.2	
	Gross cropped area	158.5	

Area under major field crops & horticulture etc.

1.6	**Irrigation**	Area ('000 ha)	Percent (%)	
	Net irrigated area	107.5	65.1	
	Gross irrigated area	109.4	69.9	
	Rainfed area	48.8	34.9	
	Sources of Irrigation	Number	Area ('000 ha)	% area
	Canals	28	8.7	8.3
	Ponds/Tanks	5451	65.7	62.7

	Open wells	164		
	Tube wells/ Bore wells	11755	22.8	21.7
	Supplemental Irrigation wells	2436		
	Total	**19834**	104.9	100.0
	Pump sets	3141		
	Other Sources	4235		
	Groundwater availability and use	No of blocks	% area	Quality of water
	Over exploited	-		83% good 7% medium saline 5% saline 3% medium alkaline 2% highly alkaline
	Critical	-		
	Semi- critical	1	7.7	
	Safe	12	92.3	
	Wastewater availability and use	Data not available		

1.7		**Major Field Crops cultivated**	**Area ('000 ha)**						
			Kharif		***Rabi***		**Summer**	**Total**	
			Irrigated	***Rainfed***	***Irrigated***	***Rainfed***		***Irrigated***	***Rainfed***
	1	Paddy	0.5	0.001	85.7	9.7	0.03	86.6	9.76
	2	Blackgram	0.1	0.3	0.18	0.002	-	0.03	0.03
	3	Groundnut	3.4	12.9	1.91	1.06	-	5.36	13.9
	4	Maize	3.2	0.006	0.01	0.06	-	3.43	0.006
	5	Sugarcane	2.5	-	4.73(Ratoon)	-	-	7.29	
		Others							
		Horticulture crops - Fruits	**Total area**						
	1	Banana	3.6						

	2	Mango	2.2
	3	Guava	0.1
	4	Jack	0.1
	5	Sappota	0.05
		Horticultural crops - Vegetables	**Total area**
	1	Vegetable	218.1
	2	Flowers	241.1

		Medicinal and Aromatic crops	**Total area**
	1	Chillies	621
	2	Coriander	68
	3	Turmeric	14
	4	Jasmine	208
		Plantation crops	**Total area**
	1	Coconut	6916.1
	2	Cocoa	190
		Fodder crops	**Total area**
	1	Cholam	8.14
	2	Suba grass	0.03
	3	Feeder grass	0.1
		Total fodder crop area	8.3
		Grazing land	4269.9
		Sericulture etc	-
		Others (Specify) Cashew	8434.8

1.8	**Livestock**	**Male ('000)**	**Female ('000)**	**Total ('000)**
	Non descriptive Cattle (local low yielding)	166.4	256.0	422.5
	Crossbred cattle	66.9	192.6	259.6
	Non descriptive Buffaloes (local low yielding)			83.9
	Graded Buffaloes			
	Goat			498.9
	Sheep			794.5
	Others (Camel, Pig, Yak etc.)			2.8
	Commercial dairy farms (Number)			50

1.9	**Poultry**	**No. of farms**	**Total No. of birds (number)**
	Commercial	10	15,000
	Backyard		4,72,311

1.10 Fisheries (Data source: Chief Planning Officer)

A. Capture

i) Marine (Data Source: Fisheries Department)	**No. of fishermen**	**Boats**		**Nets**		**Storage facilities (Ice plants etc.)**
		Mechanized	Non-mechanized	Mechanized (Trawl nets, Gill nets)	Non-mechanized (Shore Seines, Stake & trap nets)	
	51621					

ii) Inland (Data Source: Fisheries Department)	**No. Farmer owned ponds**	**No. of Reservoirs**	**No. of village tanks**
	321	----	5457

B. Culture

	Water Spread Area (ha)	**Yield (t/ha)**	**Production (tons)**

	i) **Brackish water** (Data Source: MPEDA/ Fisheries Department)	169	1	169
	ii) **Fresh water** (Data Source: Fisheries Department)	280	2	560
	Others			

1.11	**Production and Productivity of major crops** (Average of last 3 years: 2006, 07, 08)	**Kharif**		**Rabi**		**Summer**		**Total**	
		Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)	Production (tonnes)	Productivity (kg/ha)
1	Paddy	-	-	-	-	-	-	270295	3051
2	Black gram	-	-	-	-	-	-	12829	970
3	Ground nut	-	-	-	-	-	-	23889	1693
4	Maize	-	-	-	-	-	-	60575	6837
5	Sugarcane	-	-	-	-	-	-	668855	125000
	Major Horticultural crops								
1	Banana	-	-	-	-	-	-	52590	30000
2	Mango	-	-	-	-	-	-	45040	20000
3	Guava	-	-	-	-	-	-	4662	18000
4	Jackfruit	-	-	-	-	-	-	1750	25000
5	Sappota	-	-	-	-	-	-	2540	20000

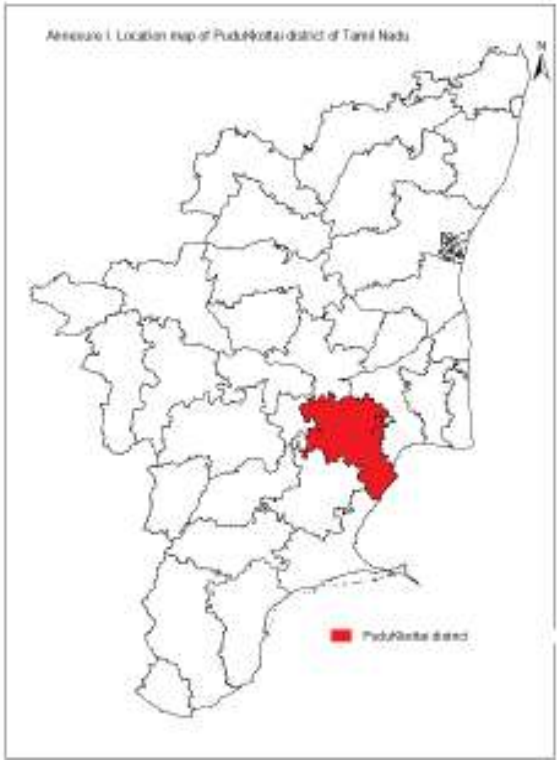
1.12	**Sowing window for 5 major crops (start and end of sowing period)**	Paddy	Blackgram	Ground nut	Maize	Sugarcane
	Kharif-Irrigated	1st week of June – 4th week of July	1st week to 4th week of July	1st week of June – 4th week of July	1st week of February – 4th week of March	1st week of December to 4th week of April

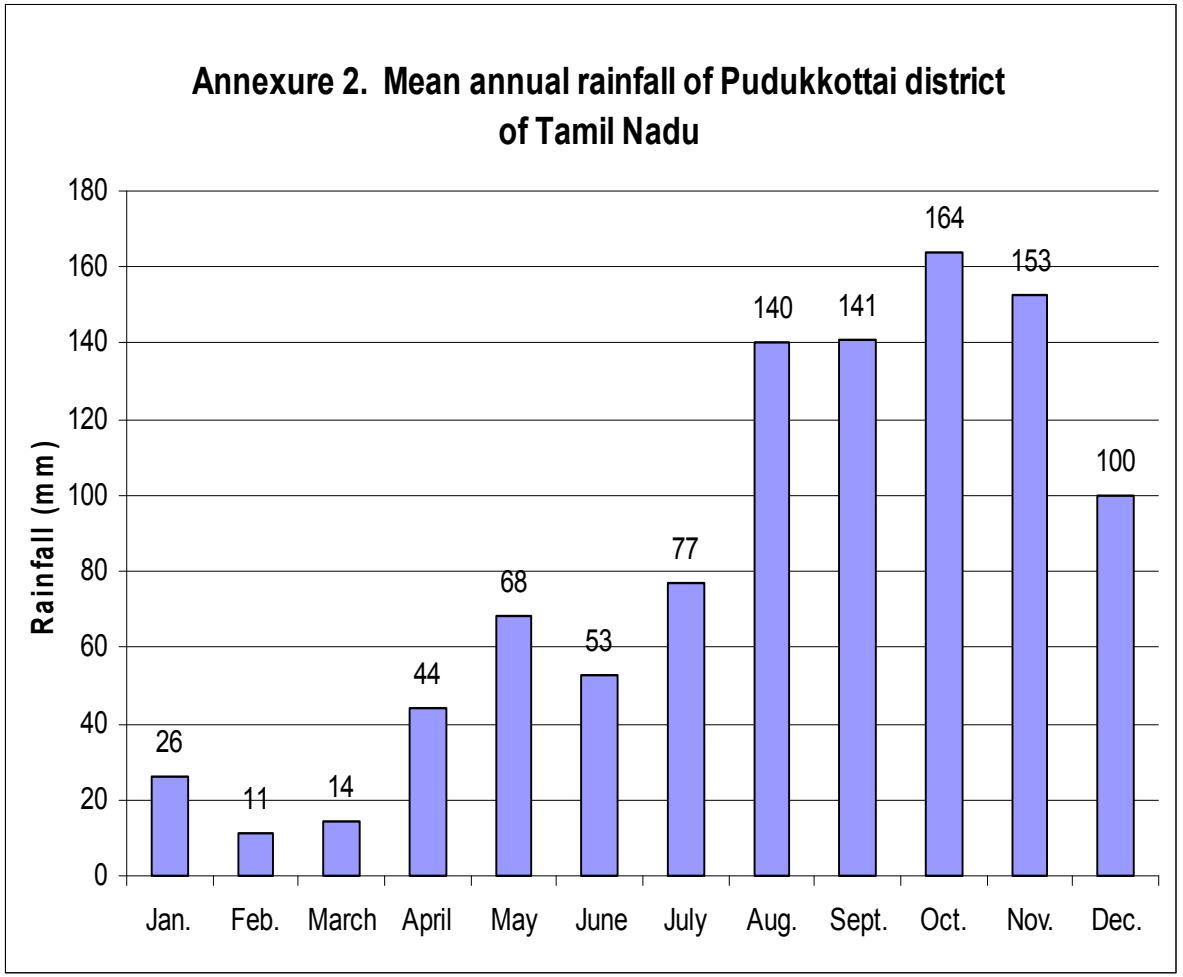
	Kharif- Rainfed	1st week of August – 4th week of September	1st week to 4th week of August	1st week of August. - 4th week of October	-	-
	Rabi-Irrigated	1st to 4th week of week of November.	1st week of February.- 4th week of March	1st to 4th week of April	-	-
	Rabi- Rainfed	1st week of December- 4th week of January	1st week to 4th week of January	1st week of December- 4th week of January	1st to 4th week of September	-

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	Occasional	None
	Drought	-	√	-
	Flood	-	-	√
	High intense storms	-	-	√
	Cyclone	-	-	√
	Hail storm	-	-	√
	Heat wave	-	-	√
	Cold wave	-	-	√
	Frost	-	-	√
	Sea water inundation	-	-	√
	Pests and diseases (specify)	√	-	-

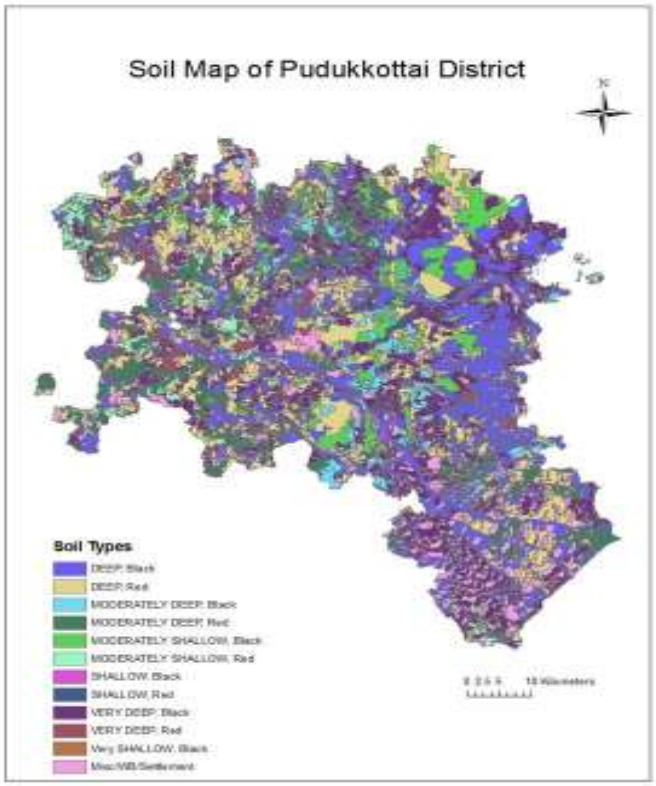
1.14	**Include Digital maps of the district for**	Location map of district within State as Annexure I	Enclosed: Yes
		Mean annual rainfall as Annexure 2	Enclosed: Yes
		Soil map as Annexure 3	Enclosed: Yes

Annexure 1. Location map of Pudukkottai district and the blocks




Annexure 2. Mean annual rainfall of Pudukkottai district of Tamil Nadu
Rainfall (mm)
180
160
140
120
100
80
60
40
20
0
26
11
14
44
68
53
77
140
141
164
153
100
Jan.
Feb.
March
April
May
June
July
Aug.
Sept.
Oct.
Nov.
Dec.

Annexure 3. Soil map of Pudukkottai district of Tamil Nadu



Source: NBSS & LUP

2.0 Strategies for weather related contingencies

2.1 Drought

2.1.1 Rainfed situation

Condition			**Suggested Contingency measures**		
Early season drought (delayed onset)	**Major Farming situation**	**Normal Crop/cropping system**	**Change in crop/cropping system**	**Agronomic measures**	**Remarks on Implementation**
Delayed by 2 weeks (July II Fort Night)	Black soil, Red Sandy soil		No Change	No Change	No Change
	Laterite and red soils	Groundnut + Redgram (5 : 1)	Groundnut (VRI 2, TMV 7)	*Enriched FYM. * Sowing behind country plough * Tractor drawn seed drill to be provided to cover large area in a short period	(ISOPOM oilseeds) * Distribution of certified seeds * Gypsum @ 50% cost. * Seed village * Seed drills
Delayed by 4 weeks (2^{nd} week of July)	Laterite and red soils	Groundnut + Cowpea	Groundnut (VRI 2, TMV 7) Cowpea CoCP 7	* Intercropping with CoCP 7 and Mixed sowing of Bajra - to control Leaf minor *Border cropping of Castor TMV-5	
Delayed by 6 weeks (4^{th} week of July)	Laterite and red soils	* Maize (Rainfed) * Castor as pure crop	*Introduction of maize *High yielding castor	* Tractor drawn seed drill * Seed priming	

Condition			Suggested Contingency measures		
Early season drought (delayed onset)	**Major Farming situation**	**Normal Crop/cropping system**	**Change in crop/cropping system**	**Agronomic measures**	**Remarks on Implementation**
Delayed by 8 weeks (2nd week of August)		Fallow	Minor millets such as varagu, cowpea	* Potash application using high yielding cowpea CoCp-6	* Seeds subsidy under ICDP * Seed distribution through NADP – Pulses subsidy scheme
Early season drought (Normal onset, followed by 15-20 days dry spell after sowing leading to poor germination/crop stand etc.)	**Major Farming situation**	**Crop/cropping system**	**Crop management**	**Soil management[d]**	**Remarks on Implementation[e]**
	Red Sandy Soils	Pigeonpea + Maize	Using polybag nursery techniques for Pigeonpea	-	-
	Laterite and red soils	Groundnut + Redgram	Does not affect the crop growth and yield.	Weeding thereby disturbs top soil which act as cushion for sub soil moisture from sunlight	* Gardenland weeder – star type to meetout labour shortage and to cover larger area in quick time

Condition			Suggested Contingency measures		
Mid season drought (long dry spell)	**Major Farming situation**	**Crop/cropping system**	**Crop management**	**Soil management**	**Remarks on Implementation**
At vegetative stage	Red sandy soils	Pigeonpea + Maize	Applying planofix to avoid flower droppings 2% KCl spray	Mulching with organic amendments	-
	Laterite and red soils	Groundnut + Redgram	water spray twice in a week to meet out the transpiration loss	Broad bed deep furrow system – at the time of sowing.	* As soon as rainfall received, Gypsum distribution at 50%

Condition			Suggested Contingency measures		
Mid season drought (long dry spell)	**Major Farming situation**	**Crop/cropping system**	**Crop management**	**Soil management**	**Remarks on Implementation**
					subsidy * 2% DAP spray
At Reproductive stage	Laterite and red soils	Groundnut + Redgram	Topping in Redgram Irrigation through Mobile sprinkler from nearby water resources	-	ISOPOM scheme
Terminal drought				Short duration Castor as relay crop	ISOPOM scheme (Oilseeds)

2.1.2 Irrigated situation

Condition			Suggested Contingency measures		
	Major Farming situation	**Crop/cropping system**	**Change in crop/cropping system**	**Agronomic measures**	**Remarks on Implementation**
Delayed/ limited release of water in canals due to low rainfall	Black soil, Red Sandy soil	Rice-Rice-Pulse Rice-Rice-Maize Rice-Rice-Gingelly Rice-Cotton	Direct sown short duration rice (September-December) Groundnut, Gingelly (December-March), Maize-ragi	*Wider Spacing (SRI cultivation of Rice). *Line sowing of Pulses/Maize. *DAP spray for Pulses	-
Non release of water in canals	Black soil, Red Sandy soil	Rice-Rice-Pulse Rice-Rice-Maize	Maize-ragi Clusterbean,	*Wider Spacing (SRI cultivation of Rice).	-

Condition			Suggested Contingency measures		
	Major Farming situation	**Crop/cropping system**	**Change in crop/cropping system**	**Agronomic measures**	**Remarks on Implementation**
under delayed onset of monsoon in catchment		Rice-Rice-Gingelly Rice-Cotton	Fodder maize/fodder cowpea	*Line sowing of Pulses/Maize. *DAP spray for Pulses	
Lack of inflows into tanks due to insufficient /delayed onset of monsoon		Paddy	Maize can be introduced	High yielding maize hybrids with drainage channels	ISOPOM
Insufficient groundwater recharge due to low rainfall	Tube well irrigation	Paddy	Aerobic Rice, Maize and vegetables (Tomato, Chilli and Brinjal) Direct sown rice	Limited irrigation Alternate Furrow irrigation Drip irrigation	NFSM (Paddy and Pulses)
	Red soil s				

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**	**Flowering stage**	**Crop maturity stage**	**Post harvest**
Paddy	Provide drainage	Provide drainage	Provide drainage	tarpaulin
Black gram	-do-	-do-	-do-	-do-
Ground nut				
Maize				
Sugarcane				
Horticulture				
Banana				
Mango				

Guava Jack Sapota				
Heavy rainfall with high speed winds in a short span				
Outbreak of pests and diseases due to unseasonal rains				
	Need based plant protection IPDM for pluses	Need based plant protection IPDM for pluses in		Safe storage against storage pest and diseases

2.3 Floods

Condition	**Suggested contingency measure**			
Transient water logging/ partial inundation	**Seedling / nursery stage**	**Vegetative stage**	**Reproductive stage**	**At harvest**
Paddy	SRI nursery / raised bed nursery	Drainage	Foliar application of N & K	Drainage Harvest at physiological maturity Salt solution spray to block the germination of grains
Horticulture				
Continuous submergence for more than 2 days				
Paddy	Wet seeding using Drum Seeder	Not affected	* Drain the excess water * Foliar application of N & K	Provision of Tarpaulin to save the leftout grains and thrashing floors

Horticulture				
Sea water inundation	-NA-			

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

Extreme event type	Suggested contingency measure			
	Seedling / nursery stage	**Vegetative stage**	**Reproductive stage**	**At harvest**
Heat Wave	NA			

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	1. Popularization of the use of chaff cutters. 2. Ensiling and enrichment of fodder grasses and sugarcane tops. 3. Fodder production with Sorghum – stylo- Sorghum on rotation basis. 4. Keeping sufficient stock of mineral mixture. 5. Curbing the sale of crop residues from the district. 6. Conservation of green and dry fodder through chaffing. 7. Creation of tree fodder models with Subabul, Glyricidia, Agathi, Prosopis etc. 8. Creation of fodder models for draught with Guinea grass, stylo, desmanthus, kolukkattai grass etc.	1. Use of unconventional and locally available cheap feed ingredients for feeding livestock. 2. Advising the farmers to feed Concentrates during cooler parts of the day. 3. Advising farmers not to allow the animals for grazing during hotter parts of the day. 4. Supplementation with tree fodder. 5. Continuous supplementation of Minerals to prevent infertility. 6. Sprinkling of water on the body to reduce the heat load. 7. Enrichment of dry fodder with urea and molasses. 8. Feeding of ensiled sugarcane tops @ not more than 10kg per cow per day 9. Feeding brewery waste wherever	1. Supply of quality seeds of COFS 29, Stylo and fodder slips of Co3, Co4, guinea grass well before monsoon and motivating the farmers to cultivate 20% of their land holding. 2. Motivating farmers to produce fodder seeds and slips. 3. Use of salt licks for goats, calves etc. 4. Storing crop residues after sprinkling 2% sodium chloride solution. 5. Mineral supplementation for heifers and cows. 6. Feeding ad libitum green fodder including legumes.

		available.	
Drinking water	Formation of community water tanks in grazing areas and in veterinary institutions.	1. Treatment of Water with Sanitizers. 2. Daily filling of community water tank to avoid microbial load. 3. Provision of look warm water to the young animals.	Provision of wholesome water to all animals irrespective of age
Health and disease management	Precaution notice and vaccination during November February: 1. Sheep pox – Kundrandarkovil block 2. FMD June – Annavasal block Aug&Dec – Karambakkudi block Sep&Oct – Aranthangi block Nov – Thiruvarankulam block 3. Blue tongue Dec – Viralimalai block 4. B.Q Nov. – Karambakkudi block	1. Visiting the diseases outbreak areas 2. Gathering information about mortality pattern 3. Reporting the outbreak to local veterinarian. 4. Ensuring proper disposal of the carcasses 5. Isolation and treatment of affected animals. 6. Deployment of vaccination squad for performing ring vaccination (8 k.m. radius) if necessary. 7. Preparation of disease investigation report and sending collected specimens to CRL and CUL for further diagnosis.	1. Sending disease outbreak annual and completion report. 2. Keeping vigil on the disease outbreak. General: 1. Nutritional supplementation 2. Breeding management
Floods			
Feed and fodder availability			
Drinking water			
Health and disease management			
Cyclone			
Feed and fodder availability	1. Provision of temporary shelter to all livestock		1. Cultivating fodder crops in wet lands. 2. Feeding unchaffed crop residues to the young

	2. Conservation of crop residues from wetting during rains. Supplementation of concentrates		pasture grazing cows.
Drinking water			
Health and disease management	February: 1. Sheep pox – Kundrandarkovil block 2. FMD June – Annavasal block Aug&Dec – Karambakkudi block Sep&Oct – Aranthangi block Nov – Thiruvarankulam block 3. Blue tongue Dec – Viralimalai block 4. B.Q Nov. – Karambakkudi block	1. Visiting the diseases outbreak areas 2. Gathering information about mortality pattern 3. Reporting the outbreak to local veterinarian. 4. Ensuring proper disposal of the carcasses 5. Isolation and treatment of affected animals. 6. Deployment of vaccination squad for performing ring vaccination (8 k.m. radius) if necessary. 7. Preparation of disease investigation report and sending collected specimens to CRL and CUL for further diagnosis.	1. Sending disease outbreak annual and completion report. 2. Keeping vigil on the disease outbreak. General: 1. Nutritional supplementation 2. Breeding management
Heat wave and cold wave			
Shelter/environment management	..	1. Splashing of water over the animals body 2. Provision of wallowing for buffaloes and pigs 3. False ceiling under roof 4. Providing concentrates to the animals during cooler parts of the day.	..
Health and disease management	February: 1. Sheep pox – Kundrandarkovil block 2. FMD June – Annavasal block	1. Visiting the diseases outbreak areas 2. Gathering information about mortality pattern 3. Reporting the outbreak to local	1. Sending disease outbreak annual and completion report. 2. Keeping vigil on the disease outbreak.

	Aug&Dec – Karambakkudi block Sep&Oct – Aranthangi block Nov – Thiruvarankulam block 3. Blue tongue Dec – Viralimalai block 4. B.Q Nov. – Karambakkudi block	veterinarian. 4. Ensuring proper disposal of the carcasses 5. Isolation and treatment of affected animals. 6. Deployment of vaccination squad for performing ring vaccination (8 k.m. radius) if necessary. 7. Preparation of disease investigation report and sending collected specimens to CRL and CUL for further diagnosis.	General: 1. Nutritional supplementation 2. Breeding management

2.5.2 Poultry

Drought	**Suggested contingency measures**			**Convergence/linkages with ongoing programs, if any**
	Before the event	**During the event**	**After the event**	
Shortage of feed ingredients	Procurement and storage of feed ingredients	Nutritional supplementation of poultry	Nutritional supplementation of poultry	-
Drinking water	Ensuring ample supply of potable water to poultry	1. Supply of cool potable water to poultry. 2. Water sanitation. 3. Filling overhead tanks with water in the afternoons. 4. Providing B-Complex and Vitamin C in water.		
Health and disease management	1. Vaccination against Ranikhet disease and IBD. 2. Deworming of poultry. 3. Provision of foggers and sprinklers to	1. Feeding during early mornings and in the evenings. 2. Maintenance of correct stocking ratio 3. Prevention and control of Coccidiosis in poultry.	1. Nutritional supplementation of poultry. 2. Preparation of road map for increasing the feed ingredients production. 3. Ensuring enough stock of	TANUVAS Agro Meteorological Advisory Centre, Namakkal. Linked to the regular vaccination programmes of the Department

	reduce heat load. 4. Supplementation of vitamins and minerals. 5. Planning to avoid laying period from 15th April to 15th June. 6. Avoiding purchase of chicks between October to January.	4. Summer management of poultry- use of foggers and sprinklers 5. Continuous supply of cool potable water. 6. Supplementation of vitamins and minerals. 7. Feeding during cooler parts of the day. 8. Avoiding vaccination and debeaking. 9. Reducing the energy density of ration and increasing the lysine, methionine and Vitamin C in the ration. 10. Mobilizing the feed ingredients from adjacent districts. Disease Outbreak: 1. Visiting poultry farm to investigate the diseases 2. Collection of sample and despatch to CUL for further diagnosis 3. Isolation and treatment affected flock. 4. Proper disposal of dead birds.	ingredients in the future. Disease Outbreak: 1. No poultry should be introduced in the area for next 3 months. 2. Compensation for forceful culling. 3. Sending the disease outbreak annual and completion report.	of Animal Husbandry.
Floods				
Shortage of feed ingredients				
Drinking water				
Health and disease management				
Cyclone				

Shortage of feed ingredients	1.Forecasting the forthcoming cyclone and informing the farmers to keep the required feed as stock to meet during the event.	1. Providing sanitized water	1. Providing sanitized water	
Drinking water	1. Forecasting the forthcoming cyclone and informing the farmers to provide warm potable water to the birds.	1. Providing sanitized water	1. Providing sanitized water	
Health and disease management	1. Vaccination against Ranikhet disease and IBD 2. Deworming of poultry 3. Supplementation of vitamins and minerals.	Disease Outbreak: 1. Visiting poultry farm to investigate the diseases 2. Collection of sample and despatch to CUL for further diagnosis 3. Isolation and treatment affected flock. 4. Proper disposal of dead birds.	Disease Outbreak: 1. No poultry should be introduced in the area for next 3 months. 2. Compensation for forceful culling. 3. Sending the disease outbreak annual and completion report.	TANUVAS Agro Meteorological Advisory Centre, Namkal. Linked to the regular vaccination programmes of the Department of Animal Husbandry.
Heat wave and cold wave				
Shelter/environment management	…	1. Provision of foggers and sprinklers 2. Reducing the energy density of ration and increasing the lysine, methionine and Vitamin C in the ration. 3. Avoiding potassium chloride and sodium bicarbonate at the required level	…	…
Health and disease management		Avoiding the outbreak of RD, Fly control measures to avoid drop in egg production		

2.5.3 Fisheries/ Aquaculture

	Suggested contingency measures		
	Before the event	**During the event**	**After the event**
1) Drought			
A. Capture	NA		
Marine			
Inland			
(i) Shallow water depth due to insufficient rains/inflow			
(ii) Changes in water quality			
B. Aquaculture			
(i) Shallow water in ponds due to insufficient rains/inflow	Safe disposal of the stock	Emergency harvest/Water supply from other sources (bore well)	Pond drying till bottom cracking
(ii) Impact of salt load build up in ponds / change in water quality	Increase in salinity		Reclamation of soil
2) Floods			
A. Capture			
Marine	Prevention of fishing	Safely return back to the shore/Staying in cyclone shelter	Return to fishing
Inland			
(i) Average compensation paid due to loss of human life	NA		
(ii) No. of boats / nets/damaged			
(iii) No.of houses damaged			
(iv) Loss of stock			
(v) Changes in water quality			
(vi) Health and diseases			
B. Aquaculture			
(i) Inundation with flood water	Raising the bunds	Damage and loss	Strengthening the bunds

(ii) Water continuation and changes in water quality	Emergency harvest		Water quality testing and corrective measures
(iii) Health and diseases	Emergency harvest		Preparation of pond following sanitation measures
(iv) Loss of stock and inputs (feed, chemicals etc)	Disposal of the stock to a safe place		Proper storage construction to keep the stock and inputs
(v) Infrastructure damage (pumps, aerators, huts etc)	Safe removal of valuables to other place		Replacement/repairing the infrsatructure
(vi) Any other			
3. Cyclone / Tsunami			
A. Capture			
Marine	Prevention of fishing	Safely return back to the shore/Staying in cyclone shelter	Rehabilitation of affected area