



	statistics)			ha)	('000 ha)			crops and groves ('000 ha)	ha)		
	Area ('000 ha)	19.459	10.732	0.064	1.176	0.0	3.022	0.392	4.578	0.22	0.134

<b>1.4</b>	<b>Major Soils (common names like red sandy loam deep soils (etc.,))*</b>	<b>Area ('000 ha)</b>	<b>Percent (%) of total</b>
	Sandy to sandy loam		60.8%

<b>1.5</b>	<b>Agricultural land use</b>	<b>Area ('000 ha)</b>	<b>Cropping intensity %</b>
	Net sown area	9.864	108.7 %
	Area sown more than once	0.868	
	Gross cropped area	10.732	

<b>1.6</b>	<b>Irrigation</b>	<b>Area ('000 ha)</b>		
	Net irrigated area	9.864		
	Gross irrigated area	10.732		
	Rainfed area	0.0		
	<b>Sources of Irrigation</b>	Number	<b>Area ('000 ha)</b>	<b>% of total irrigated area</b>
	Canals/Small Canals		9.821	100 %
	Tanks			
	Open wells			
	Bore wells			
	Lift irrigation schemes			
	Micro-irrigation			
	Other sources (please specify)			
	Total Irrigated Area		9.821	100 %
	Pump sets			
	No. of Tractors	40		
	<b>Groundwater availability and use* (Data source: State/Central Ground water</b>	<b>No. of blocks/ Tehsils</b>	<b>(%) area</b>	<b>Quality of water (specify the problem such as high levels of</b>

	Department /Board)			arsenic, fluoride, saline etc)
	Over exploited			
	Critical			
	Semi- critical			
	Safe			
	Wastewater availability and use			
	Ground water quality			
<b>*over-exploited: groundwater utilization &gt; 100%; critical: 90-100%; semi-critical: 70-90%; safe: &lt;70%</b>				

**1.7 Area under major field crops & horticulture (as per latest figures) (Specify year 2008-2009)**

1.7a	Major field crops cultivated	Area ('000 ha)							Summer	Grand total
		<i>Kharif</i>			<i>Rabi</i>					
		Irrigated	Rainfed	Total	Irrigated	Rainfed	Total			
	Barley	3.029	-	4.558	-	-	-	-	4.558	
	Wheat	1.764	-	2.210	-	-	-	-	2.210	
	Pulses	0.547	-	0.870	-	-	-	-	0.870	
	Oil seed	0.030	-	0.030	-	-	-	-	0.030	
	Lucerne (Alfa-Alfa)	2.810	-	2.810	-	-	-	-	2.810	
Others (specify)	Millets	0.571								
1.7b	Horticulture crops - Fruits	Area ('000 ha)							Irrigated	Rainfed ('000 ha)
		Total			Irrigated					
	Apricot	1.277			1.878			-		
	Apple	0.204			0.193			-		

	Pear	0.014	0.029	-
	Peach	0.002	0.007	-
	Plum	0.001	0.003	-
	Cherry	0.009	0.011	-
	Walnut	0.013	0.031	
	<b>Almond</b>	<b>0.003</b>	<b>0.004</b>	
	<b>Total</b>			
<b>1.7c</b>	<b>Horticulture crops - Vegetables</b>	<b>Total area ('000 ha)</b>	<b>Irrigated area ('000 ha)</b>	<b>Rainfed area ('000 ha)</b>
	<b>Potato</b>	0.216		
<b>1.7d</b>	<b>Medicinal and Aromatic crops</b>	<b>Total area ('000 ha)</b>	<b>Irrigated area ('000 ha)</b>	<b>Rainfed area ('000 ha)</b>
	Medicinal and Aromatic crops	<b>N. A</b>		
<b>1.7e</b>	<b>Plantation crops</b>			
<b>1.7f</b>	<b>Fodder crops</b>			
	Lucerne (Alfa-Alfa)	2.810	2.810	-
	Buck wheat	0.070	0.070	
<b>1.7g</b>	<b>Grazing/Pasture land</b>	<b>1.058</b>	<b>1.058</b>	-
<b>1.7h</b>	<b>Sericulture etc</b>	-	-	-
<b>1.7i</b>	<b>Others (specify)</b>			

<b>1.8</b>	<b>Livestock (in number)</b>	<b>Male ('000)</b>	<b>Female ('000)</b>	<b>Total ('000)</b>		
	Non descriptive Cattle (local low yielding)			45		
	Crossbred cattle (Crossbred + Local)					
	Non descriptive Buffaloes (local low yielding)					
	Graded Buffaloes					
	Goat (local)			75.9		
	Sheep (Cross breed)			93.9		
	Others (Camel, Yak etc.)			23.0		
Commercial dairy farms (Number)			-			
<b>1.9</b>	<b>Poultry</b>	<b>No. of farms</b>	<b>Total No. of birds ('000)</b>			
	Commercial	-	-			
	Backyard (Local)	32604 No.				
<b>1.10</b>	<b>Fisheries (Data source: Chief Planning Officer of district)</b>					
	<b>A. Capture</b>					
	<b>i) Marine (Data Source: Fisheries Department)</b>	<b>No. of fishermen</b>	<b>Boats</b>		<b>Nets</b>	<b>Storage facilities (Ice plants etc.)</b>
			Mechanized	Non-mechanized		
	<b>ii) Inland (Data Source: Fisheries Department)</b>	<b>No. Farmer owned ponds</b>		<b>No. of Reservoirs</b>	<b>No. of village tanks</b>	
<b>B. Culture</b>						
		<b>Water Spread Area (ha)</b>	<b>Yield (t/ha)</b>	<b>Production ('000 tons)</b>		
	<b>i) Brackish water (Data Source: MPEDA/ Fisheries Department)</b>					
	<b>ii) Fresh water (Data Source: Fisheries Department)</b>					
	<b>Others</b>					

### 1.11 Production and Productivity of major crops

1.11	Name of crop	Kharif		Rabi		Summer		Total		Crop residue as fodder ('000 tons)
		Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)	Production ('000 t)	Productivity (kg/ha)	
<b>Major Field crops (Crops to be identified based on total acreage)</b>										
	Barley	6.600	1487					6.600	1487	
	Wheat	4.360	1469					4.360	1469	
	Pulses	0.150	585					0.150	585	
	Oil seed	0.120	620					0.120	620	
	Millets	0.040	200					0.040	200	
	Others									
<b>Major Horticultural crops (Crops to be identified based on total acreage)</b>										
	Apricot	4.785	4048.14					3.130	4048.14	
	Apple	1.021	6276.75					3.820	6276.75	
	Walnut	0.012	2188.73					0.112	2188.73	
	Pear	0.005	37.290					0.008	37.290	
	Peach	0.005	-					0.007	-	
	plum	0.001	-					-	-	

1.12	Sowing window for 5 major field crops (start and end of normal sowing period)	Barley	Wheat	Pulses	Oil Seed	Alfafa
	Kharif- Rainfed	-	-	-	-	-
	Kharif-Irrigated	May- June	April-May	April-May	April-May	April

	Rabi- Rainfed	-	-	-	August (2 <sup>nd</sup> Crop)	-
	Rabi-Irrigated	-	-	-	-	-

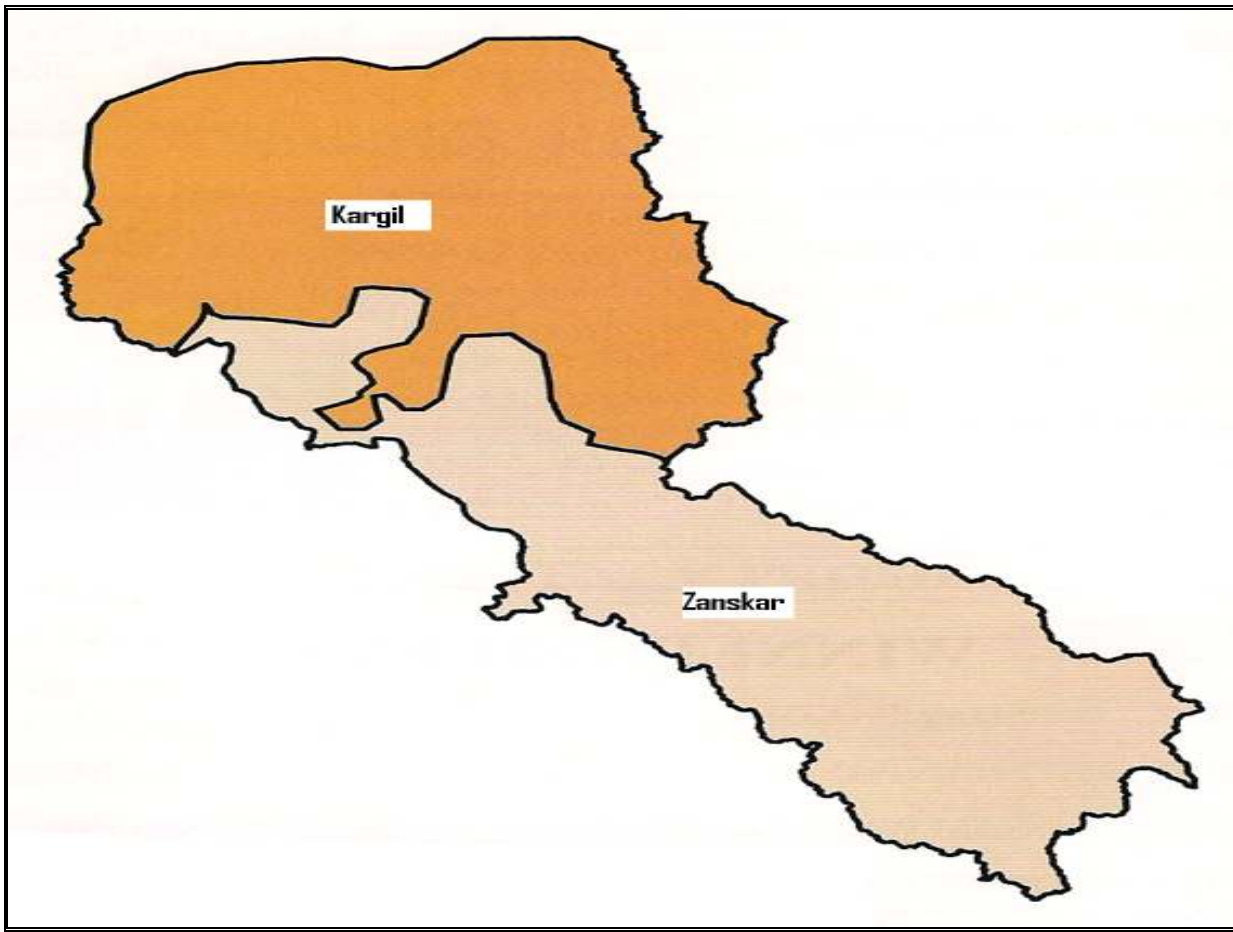
1.13	What is the major contingency the district is prone to? (Tick mark)	Regular	Occasional	None
	Drought			
	Flood			✓
	Cyclone			✓
	Hail storm			✓
	Heat wave			✓
	Cold wave	✓	-	-
	Frost	✓		
	Sea water intrusion			✓
	Pests and disease outbreak (specify)			✓
	Others (specify) Locusts, Codling moth Aphids	✓		

**6 out of 10 years = Regular**

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

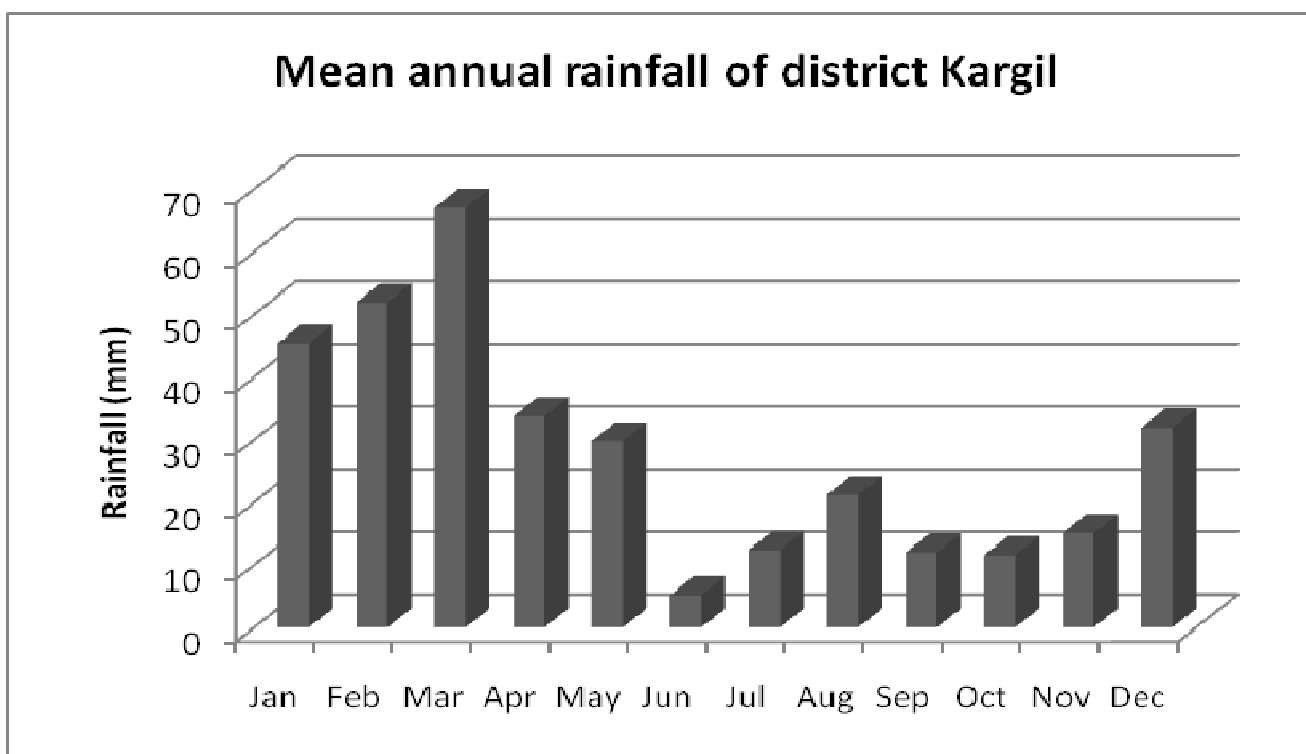
### Annexure I

#### Map of Kargil



Annexure I





## 2.0 Strategies for weather related contingencies

### 2.1 Drought-Not Applicable

#### 2.1.1 Rainfed situation

Condition			Suggested Contingency measures		
Early season drought (delayed onset)	Major Farming situation <sup>a</sup>	Normal Crop / Cropping system <sup>b</sup>	Change in crop / cropping system <sup>c</sup> including variety	Agronomic measures <sup>d</sup>	Remarks on Implementation <sup>e</sup>
		There is no rainfed agriculture in Leh (ladakh) district as annual rainfall(including snow) is only 337 mm			

Condition			Suggested Contingency measures		
Early season drought (delayed onset)	Major Farming situation <sup>a</sup>	Normal Crop/cropping system <sup>b</sup>	Change in crop/cropping system <sup>c</sup>	Agronomic measures <sup>d</sup>	Remarks on Implementation <sup>e</sup>
		NA			

Condition			Suggested Contingency measures		
Early season drought (delayed onset)	Major Farming situation <sup>a</sup>	Normal Crop/cropping system <sup>b</sup>	Change in crop/cropping system <sup>c</sup>	Agronomic measures <sup>d</sup>	Remarks on Implementation <sup>e</sup>
NA					

Condition			Suggested Contingency measures		
Early season drought (delayed onset)	Major Farming situation <sup>a</sup>	Normal Crop/cropping system <sup>b</sup>	Change in crop/cropping system <sup>c</sup>	Agronomic measures <sup>d</sup>	Remarks on Implementation <sup>e</sup>
	NA				

Condition			Suggested Contingency measures		
Early season drought (Normal onset)	Major Farming situation <sup>a</sup>	Normal Crop/cropping system <sup>b</sup>	Crop management <sup>c</sup>	Soil nutrient & moisture conservation measures <sup>d</sup>	Remarks on Implementation <sup>e</sup>
		NA			

Condition			Suggested Contingency measures		
Mid season drought (long dry spell, consecutive 2 weeks rainless (>2.5 mm))	Major Farming situation <sup>a</sup>	Normal Crop/cropping system <sup>b</sup>	Crop management <sup>c</sup>	Soil nutrient & moisture conservation measures <sup>d</sup>	Remarks on Implementation <sup>e</sup>

<b>period)</b>					
		NA			

<b>Condition</b>			<b>Suggested Contingency measures</b>		
<b>Mid season drought (long dry spell)</b>	<b>Major Farming situation<sup>a</sup></b>	<b>Normal Crop/cropping system<sup>b</sup></b>	<b>Crop management<sup>c</sup></b>	<b>Soil nutrient &amp; moisture conservation measrues<sup>d</sup></b>	<b>Remarks on Implementation<sup>e</sup></b>
		NA			

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

### 2.1.2 Drought - Irrigated situation

<b>Condition</b>			<b>Suggested Contingency measures</b>		
	<b>Major Farming situation<sup>f</sup></b>	<b>Normal Crop/cropping system<sup>g</sup></b>	<b>Change in crop/cropping system<sup>h</sup></b>	<b>Agronomic measures<sup>i</sup></b>	<b>Remarks on Implementation<sup>j</sup></b>
<b>Delayed release of water in canals due to low temperature &amp; melt of glaciers</b>	Sandy loam soil along Glacier melt streams Mid altitudes	a. Wheat-Fallow b. Barley -Fallow c. Alfalfa d. Pulses	Change not recommended	Pre-sowing irrigation Repair of water reservoirs	

Condition			Suggested Contingency measures		
	Major Farming situation <sup>f</sup>	Normal Crop/cropping system <sup>g</sup>	Change in crop/cropping system <sup>h</sup>	Agronomic measures <sup>i</sup>	Remarks on Implementation <sup>j</sup>
	Sandy loam soil Low altitude	a. Wheat-Buckwheat b. Barley-Buckwheat c. Potato d. Alfalfa e. Pulses	Change not recommended	Reduced tillage Repairs of irrigation canals & reservoirs	
Limited release of water in canals due to low rainfall/charging of glaciers	1.Farming Situation	a. Wheat-Fallow b. Barley –Fallow c. Alfalfa	Alfalfa-fallow Barley-fallow Wheat-fallow	Local varieties Mulching Reduce N fertilization Increase use of organics	
	2. Farming situation	a. Wheat-Buckwheat b. Barley-Buckwheat c. Potato d. Alfalfa	Alfalfa-fallow Barley-fallow Wheat-fallow	Local varieties Mulching Reduce N fertilization Increase use of organics	

Condition			Suggested Contingency measures		
	Major Farming situation <sup>f</sup>	Normal Crop/cropping system <sup>g</sup>	Change in crop/cropping system <sup>h</sup>	Agronomic measures <sup>i</sup>	Remarks on Implementation <sup>j</sup>
Non release of water in canals under delayed onset of monsoon in catchment	1.Farming Situation	a. Wheat-Fallow b. Barley -Fallow c. Alfalfa d. Trench vegetables	NA		
	2. Farming situation	a. Wheat-Buckwheat b. Barley-Buckwheat c. Potato d. Alfalfa	NA		

Condition	Suggested Contingency measures				
	Major Farming situation <sup>f</sup>	Normal Crop/cropping system <sup>g</sup>	Change in crop/cropping system <sup>h</sup>	Agronomic measures <sup>i</sup>	Remarks on Implementation <sup>j</sup>
Lack of inflows into tanks due to insufficient /Delayed onset of monsoon	1) Farming Situation	<b>Cropping System: 1</b>			
		a. Wheat-Fallow b. Barley -Fallow c. Alfalfa d. Pulses	NA		
	2) Farming Situation	a. Wheat-Buckwheat b. Barley-Buckwheat c. Potato d. Alfalfa			
Condition	Suggested Contingency measures				
Major Farming situation <sup>f</sup>	Normal Crop/cropping system <sup>g</sup>	Change in crop/cropping system <sup>h</sup>	Agronomic measures <sup>i</sup>	Remarks on Implementation <sup>j</sup>	
Insufficient groundwater recharge(Springs) due to low precipitation on glaciers	1) Farming Situation	a. Wheat-Fallow b. Barley -Fallow c. Alfalfa d. Pulses	Wheat Barley Alfalfa	Local varieties Mulching Reduce N fertilization Increase use of organics	
	2) Farming Situation	a. Wheat-Buckwheat b. Barley-Buckwheat c. Potato d. Alfalfa e. Pulses	Wheat Barley Alfalfa	Local varieties Mulching Reduce N fertilization Increase use of organics	

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

Condition	Suggested contingency measure			
	Vegetative stage <sup>k</sup>	Flowering stage <sup>l</sup>	Crop maturity stage <sup>m</sup>	Post harvest <sup>n</sup>
Continuous high rainfall in a short span leading to water logging	NA	NA	NA	NA
As total annual precipitation is 337.2 mm				

<b>Horticulture</b>				
<b>Heavy rainfall with high speed winds in a short span<sup>2</sup></b>				
<b>Horticulture</b>				
<b>Outbreak of pests and diseases due to unseasonal rains</b>				
	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 : Not experienced / encountered

Condition	Suggested contingency measure <sup>o</sup>			
	Seedling / nursery stage	Vegetative stage	Reproductive stage	At harvest
<b>Transient water logging/ partial inundation<sup>1</sup></b>				
<b>Horticulture</b>				
<b>Continuous submergence for more than 2 days<sup>2</sup></b>				
<b>Horticulture</b>				
<b>Sea water intrusion<sup>3</sup></b>				

### 2.4 Extreme events: Heat wave / Cold wave/Frost/ Hailstorm /Cyclone : Not experienced / encountered

Extreme event type	Suggested contingency measure <sup>r</sup>			
	Seedling / nursery stage	Vegetative stage	Reproductive stage	At harvest
<b>Heat Wave<sup>p</sup></b>				
<b>Horticulture</b>				
<b>Cold wave<sup>q</sup></b>				
<b>Horticulture</b>				
<b>Frost</b>				

<b>Horticulture</b>				
<b>Hailstorm</b>				
<b>Horticulture</b>				
<b>Cyclone</b>				
<b>Horticulture</b>				

## 2.5 Contingent strategies for Livestock, Poultry & Fisheries

### 2.5.1 Livestock

	Suggested contingency measures		
	Before the event <sup>s</sup>	During the event	After the event
<b>Drought</b>			
Feed and fodder availability	Arrange and Store hay in bulk Use excessive fodder for making hay	-Use urea molasses treated roughage -Use feed blocks prepared from crop residue -Ensure availability of mineral mixture	
Drinking water	Ensure storage of drinking water in storage tanks	Ensure storage of water	
Health and disease management	Arrangement and preparedness with required medicine stock	Vaccination for foot and mouth disease and other required dosage and vaccination if not done earlier	Culling sick and unproductive livestock.
<b>Floods</b>			
Feed and fodder availability	-		
Drinking water			
Health and disease management			
<b>Cyclone</b>			
Feed and fodder availability			

Drinking water			
Health and disease management			
<b>Heat wave and cold wave</b>			
Shelter/environment management	Provide heating and proper ventilation	Ensure live stock is not subjected to direct cold	
Health and disease management			

<sup>s</sup> based on forewarning wherever available

### 2.5.2 Poultry

	Suggested contingency measures			Convergence/linkages with ongoing programs, if any
	Before the event <sup>a</sup>	During the event	After the event	
<b>Drought</b>				
Shortage of feed ingredients	Ensure stock of feed	Utilize stored feed	Culling of affected birds	
Drinking water	Storage in water reservoirs	Use stored water	-	
Health and disease management	Preparedness and arrangement of vaccination	Mass vaccination	Culling of diseased birds	
<b>Floods</b>				
Shortage of feed ingredients				
Drinking water				
Health and disease management				



<b>Cyclone</b>				
Shortage of feed ingredients				
Drinking water				
Health and disease management				
<b>Heat wave and cold wave</b>				
Shelter/environment management				
Health and disease management				

<sup>a</sup> based on forewarning wherever available

### 2.5.3 Fisheries/ Aquaculture

	Suggested contingency measures		
	Before the event <sup>a</sup>	During the event	After the event
<b>1) Drought</b>			
<b>A. Capture</b>	Prepare additional water reservoirs and exigency ponds	<ul style="list-style-type: none"> <li>• Protect brood stock by making deep trenches in the middle of ponds.</li> <li>• Provide aeration</li> <li>• Stop feeding/restrict feeding</li> </ul>	
Marine			
Inland			
(i) Shallow water depth due to insufficient rains/inflow			
(ii) Changes in water quality			

(iii) Any other			
<b>B. Aquaculture</b>			
(i) Shallow water in ponds due to insufficient rains/inflow			
(ii) Impact of salt load build up in ponds / change in water quality			
(iii) Any other			
<b>2) Floods</b>			
<b>A. Capture</b>			
Marine			
Inland			
(i) Average compensation paid due to loss of human life			
(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>B. Aquaculture</b>			
(i) Inundation with flood water			
(ii) Water contamination and changes in water quality			
(iii) Health and diseases			
(iv) Loss of stock and inputs (feed, chemicals etc)			
(v) Infrastructure damage (pumps, aerators, huts etc)			

(vi) Any other			
<b>3. Cyclone / Tsunami</b>			
<b>A. Capture</b>			
Marine			
(i) Average compensation paid due to loss of fishermen lives			
(ii) Avg. no. of boats / nets/damaged			
(iii) Avg. no. of houses damaged			
Inland			
<b>B. Aquaculture</b>			
(i) Overflow / flooding of ponds			
(ii) Changes in water quality (fresh water / brackish water ratio)			
(iii) Health and diseases			
(iv) Loss of stock and inputs (feed, chemicals etc)			
(v) Infrastructure damage (pumps, aerators, shelters/huts etc)			
(vi) Any other			
<b>4. Heat wave and cold wave</b>			
<b>A. Capture</b>			
Marine			
Inland			
<b>B. Aquaculture</b>			
(i) Changes in pond environment			

(water quality)			
(ii) Health and Disease management			
(iii) Any other			

<sup>a</sup> based on forewarning wherever available