# State: Jammu and Kashmir

# Agriculture Contingency Plan for District: Kargil

| 1.0 District Agriculture profile | | | | | | |
|---|---|---|---|---|---|---|
| **1.1** | **Agro-Climatic/Ecological Zone** | | | | | |
| | **Agro Ecological Sub Region (ICAR)** | Western Himalayas, Warm Subhumid (To Humid With Inclusion Of Perhumid) Eco-Region(14.1) | | | | |
| | **Agro-Climatic Zone (Planning Commission)** | Western Himalayan Region (I) | | | | |
| | **Agro Climatic Zone (NARP)** | Cold Arid Region (JK-4) | | | | |
| | List all the districts or part thereof falling under the NARP Zone | Leh and Kargil | | | | |
| | **Geographic coordinates of district headquarters** | **Latitude** | | **Longitude** | | **Altitude** |
| | | $34^0$ -32' N | | $76^0$ -08' E | | 9087 ft |
| | **N**ame and address of the concerned **ZRS/ ZARS/ RARS/ RRS/ RRTTS** | **Sher-e- Kashmir University of Agricultural Sciences and Technology of Kashmir, RARS, Kargil** | | | | |
| | **Mention the KVK located in the district** | **KVK, Kargil.** | | | | |
| **1.2** | **Rainfall** | **Normal RF(mm)** | **Normal Rainy days (number)** | **Normal Onset ( specify week and month)** | | **Normal Cessation (specify week and month)** |
| | No concept of SW and NE Monsoon. Precipitation in the form of Snow and Rain | 337.2 | 20 days | November to March (S)<br>May – September - Irregular (R ) | | Irregular |
| | Annual | 337.2 | | | | |

| **1.3** | Land use pattern of the district (latest | Geographical area (‘000 ha) | Cultivable area (‘000 ha) | Forest area (‘000 | Land under non-agricultural use | Permanent Pastures (‘000 ha) | Cultivable wasteland (‘000 ha) | Land under Misc. tree | Barren and uncultivable land (‘000 | Current Fallows (‘000 ha) | Other fallows (‘000 ha) |
|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 |

| **1. 4** | **Major Soils (common names like red sandy loam deep soils (etc.,)*** | **Area (‘000 ha)** | **Percent (%) of total** |
|---|---|---|---|
| | Sandy to sandy loam | | 60.8% |

| **1.5** | **Agricultural land use** | **Area (‘000 ha)** | **Cropping intensity %** |
|---|---|---|---|
| | Net sown area | 9.864 | 108.7 % |
| | Area sown more than once | 0.868 | |
| | Gross cropped area | 10.732 | |

| **1.6** | **Irrigation** | **Area (‘000 ha)** | | |
|---|---|---|---|---|
| | Net irrigated area | 9.864 | | |
| | Gross irrigated area | 10.732 | | |
| | Rainfed area | 0.0 | | |
| | **Sources of Irrigation** | Number | **Area (‘000 ha)** | **% of total irrigated area** |
| | 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 | | |
| | **Groundwater availability and use* (Data source: State/Central Ground water** | **No. of blocks/ Tehsils** | **(%) area** | **Quality of water (specify the problem such as high levels of** |

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

**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)** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | ***Kharif*** | | | ***Rabi*** | | | **Summer** | **Grand total** |
| | | **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** | | | |
|---|---|---|---|---|
| | | **Total** | **Irrigated** | **Rainfed ('000 ha)** |
| | 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 | |
| | **Almond** | **0.003** | **0.004** | |
| | **Total** | | | |
| **1.7c** | **Horticulture crops - Vegetables** | **Total area ('000 ha)** | **Irrigated area ('000 ha)** | **Rainfed area ('000 ha)** |
| | **Potato** | 0.216 | | |
| **1.7d** | **Medicinal and Aromatic crops** | **Total area ('000 ha)** | **Irrigated area ('000 ha)** | **Rainfed area ('000 ha)** |
| | Medicinal and Aromatic crops | **N. A** | | |
| **1.7e** | **Plantation crops** | | | |
| **1.7f** | **Fodder crops** | | | |
| | Lucerne (Alfa-Alfa) | 2.810 | 2.810 | - |
| | Buck wheat | 0.070 | 0.070 | |
| **1.7g** | **Grazing/Pasture land** | **1.058** | **1.058** | **-** |
| **1.7h** | **Sericulture etc** | - | - | **-** |
| **1.7i** | **Others (specify)** | | | |

| 1.8 | **Livestock (in number)** | **Male (‘000)** | **Female (‘000)** | **Total (‘000)** |
|---|---|---|---|---|
| | 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) | | | - |
| **1.9** | **Poultry** | **No. of farms** | **Total No. of birds (‘000)** | |
| | Commercial | - | - | |
| | Backyard (Local) | 32604 No. | | |

| **1.10** | **Fisheries (Data source: Chief Planning Officer of district)** | | | | | | |
|---|---|---|---|---|---|---|---|
| | **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) | |
| | | | | | | | |
| | **ii) Inland (Data Source: Fisheries Department)** | **No. Farmer owned ponds** | | **No. of Reservoirs** | | **No. of village tanks** | |
| | | | | | | | |
| | **B. Culture** | | | | | | |

| | | **Water Spread Area (ha)** | **Yield (t/ha)** | **Production (‘000 tons)** |
|---|---|---|---|---|
| | **i) Brackish water (Data Source: MPEDA/ Fisheries Department)** | | | |
| | **ii) Fresh water (Data Source: Fisheries Department)** | | | |
| | **Others** | | | |

### 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) | |
| **Major Field crops (Crops to be identified based on total acreage)** | | | | | | | | | | |
| | 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 | | | | | | | | | |
| **Major Horticultural crops (Crops to be identified based on total acreage)** | | | | | | | | | | |
| | 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 (2nd Crop) | - |
| | Rabi-Irrigated | - | - | - | - | - |

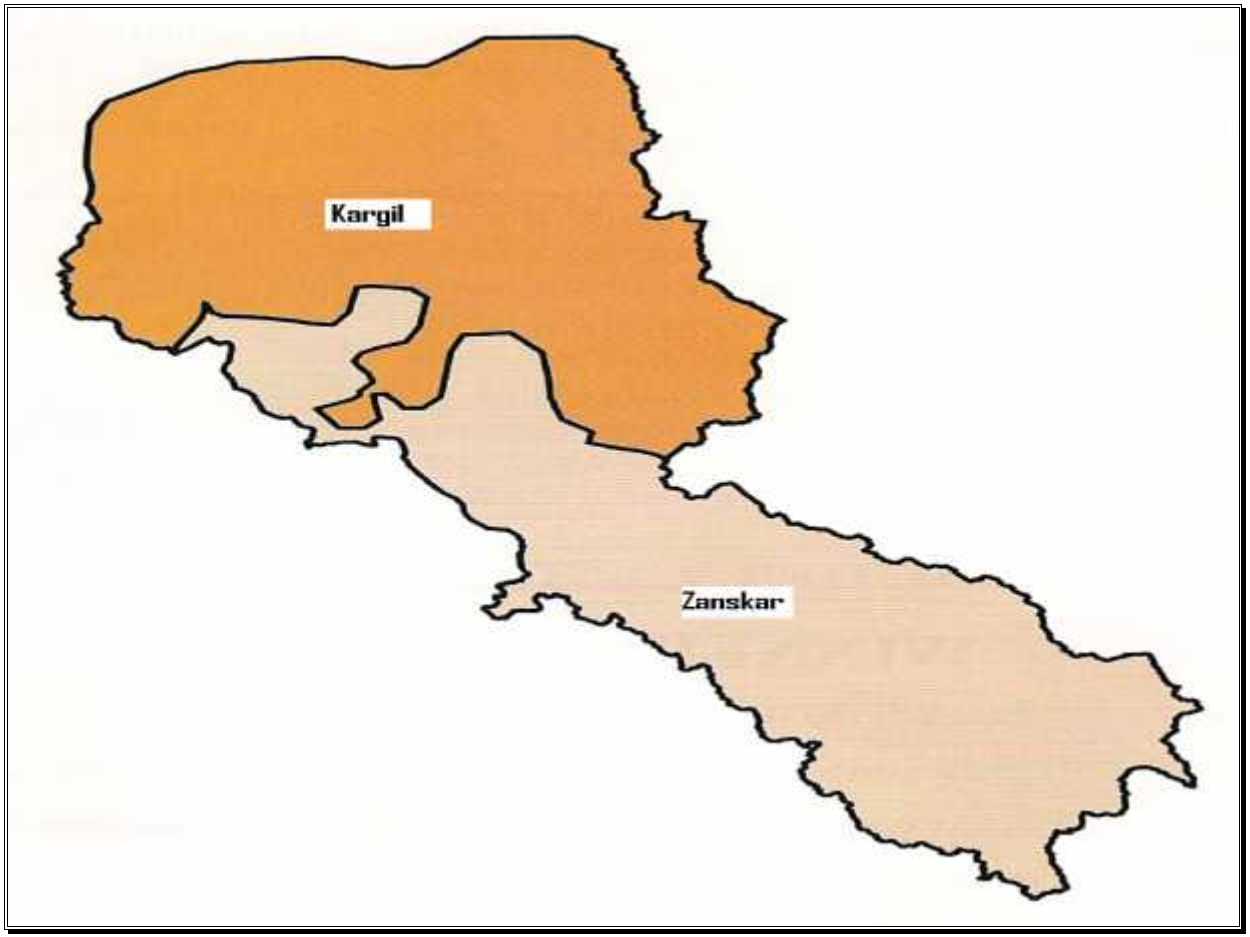
| 1.13 | **What is the major contingency the district is prone to?** (Tick mark) | **Regular** | **Occasional** | **None** |
|---|---|---|---|---|
| | Drought | | | |
| | Flood | | | ✓ |
| | Cyclone | | | ✓ |
| | Hail storm | | | ✓ |
| | Heat wave | | | ✓ |
| | Cold wave | ✓ | - | - |
| | Frost | ✓ |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

**6 out of 10 years = Regular**

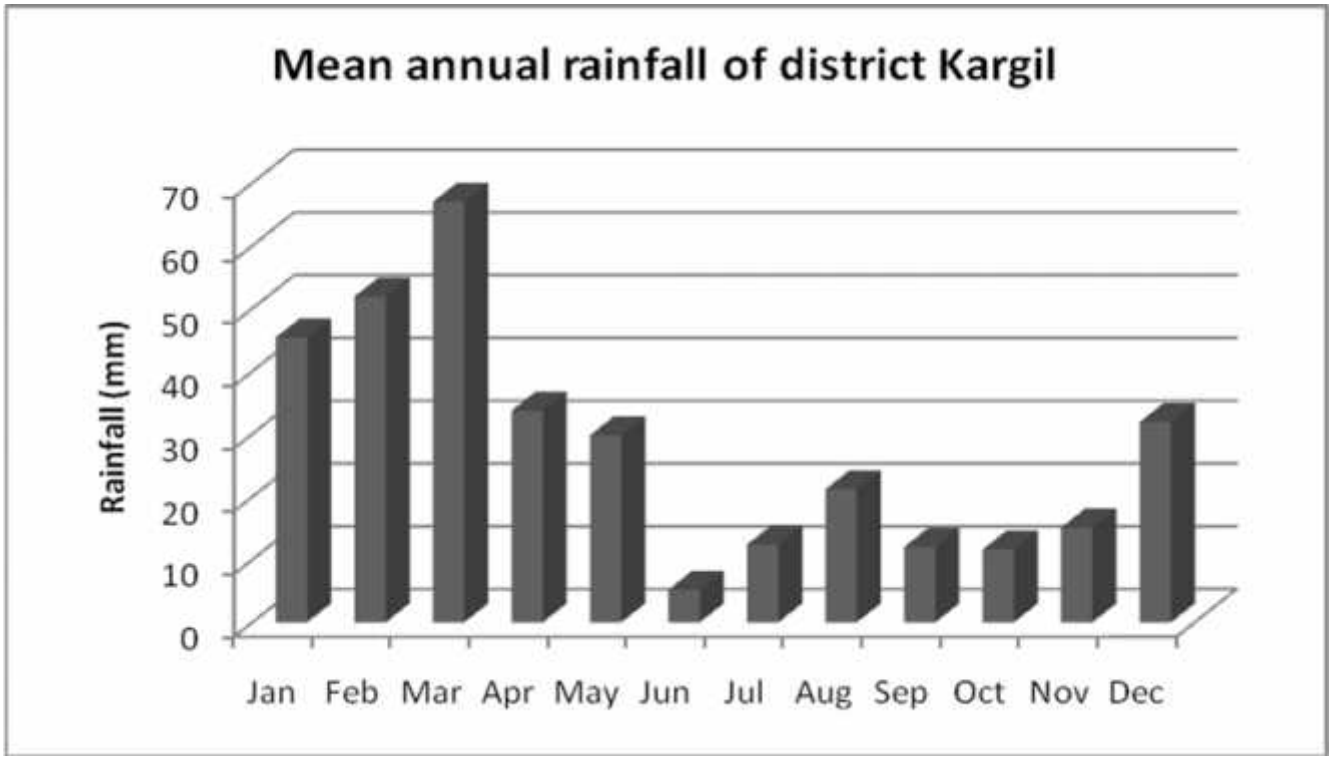
| 1.14 | **Include Digital maps of the district for** | Location map of district within State as Annexure I | Enclosed: Yes |
|---|---|---|---|
| | | Mean annual rainfall as Annexure 2 | Enclosed: Yes |
| | | Soil map as Annexure 3 | Enclosed: No |

**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[a]** | **Normal Crop / Cropping system[b]** | **Change in crop / cropping system[c] including variety** | **Agronomic measures[d]** | **Remarks on Implementation[e]** |
| | | 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[a]** | **Normal Crop/cropping system[b]** | **Change in crop/cropping system[c]** | **Agronomic measures[d]** | **Remarks on Implementation[e]** |
| | | **NA** | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Condition** | | | **Suggested Contingency measures** | | |
| **Early season drought(del ayed onset)** | **Major Farming situation[a]** | **Normal Crop/cropping system[b]** | **Change in crop/cropping system[c]** | **Agronomic measures[d]** | **Remarks on Implementation[e]** |
| | | **NA** | | | |

| | | | | | |
|---|---|---|---|---|---|
| **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]** |
| | **NA** | | | | |

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

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

| | | | | | |
|---|---|---|---|---|---|
| **period)** | | | | | |
| | | **NA** | | | |

| **Condition** | | | **Suggested Contingency measures** | | |
|---|---|---|---|---|---|
| **Mid season drought (long dry spell)** | **Major Farming situation[a]** | **Normal Crop/cropping system[b]** | **Crop management[c]** | **Soil nutrient & moisture conservation measrues[d]** | **Remarks on Implementation[e]** |
| | | **NA** | | | |

| **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]** |
| | | **NA** | | | |

### 2.1.2 Drought - Irrigated situation

| **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 water in canals due to low temperature & melt of glaciers** | Sandy loam soil along Glacier melt streams Mid altitudes | a. Wheat-Fallow<br>b. Barley -Fallow<br>c. Alfalfa<br>d. Pulses | Change not recommended | Pre-sowing irrigation<br>Repair of water reservoirs | |

| 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]** |
| | Sandy loam soil<br>Low altitude | a. Wheat-Buckwheat<br>b. Barley-Buckwheat<br>c. Potato<br>d. Alfalfa<br>e. Pulses | Change not recommended | Reduced tillage<br>Repairs of irrigation canals & reservoirs | |
| **Limited release of water in canals due to low rainfall/charging of glaciers** | **1.Farming Situation** | a. Wheat-Fallow<br>b. Barley –Fallow<br>c. Alfalfa | Alfalfa-fallow<br>Barley-fallow<br>Wheat-fallow | Local varieties<br>Mulching<br>Reduce N fertilization<br>Increase use of organics | |
| | **2. Farming situation** | a. Wheat-Buckwheat b. Barley-Buckwheat c. Potato<br>d. Alfalfa | Alfalfa-fallow<br>Barley-fallow<br>Wheat-fallow | Local varieties<br>Mulching<br>Reduce N fertilization<br>Increase use of organics | |

| 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** | **1.Farming Situation** | a. Wheat-Fallow<br>b. Barley -Fallow<br>c. Alfalfa<br>d. Trench vegetables | NA | | |
| | **2. Farming situation** | a. Wheat-Buckwheat<br>b. Barley-Buckwheat<br>c. Potato<br>d. Alfalfa | NA | | |

| 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]** |
| **Lack of inflows into tanks due to insufficient /Delayed onset of monsoon** | **1) Farming Situation** | **Cropping System:1** | | | |
| | | a. Wheat-Fallow | NA | | |
| | | b. Barley -Fallow<br>c. Alfalfa<br>d. Pulses | | | |
| | **2) Farming Situation** | a. Wheat-Buckwheat | | | |
| | | b. Barley-Buckwheat | | | |
| | | c. Potato<br>d. Alfalfa | | | |
| **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]** |
| **Insufficient groundwater recharge(Springs) due to low precipitation on glaciers** | **1) Farming Situation** | a. Wheat-Fallow<br>b. Barley -Fallow<br>c. Alfalfa<br>d. Pulses | Wheat<br>Barley<br>Alfalfa | Local varieties<br>Mulching<br>Reduce N fertilization<br>Increase use of organics | |
| | **2) Farming Situation** | a. Wheat-Buckwheat<br>b. Barley-Buckwheat<br>c. Potato<br>d. Alfalfa<br>e. Pulses | Wheat<br>Barley<br>Alfalfa | Local varieties<br>Mulching<br>Reduce N fertilization<br>Increase use of organics | |

**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[l]** | **Crop maturity stage[m]** | **Post harvest[n]** |
| | NA | NA | NA | NA |
| | As total annual precipitation is 337.2 mm | | | |

| | | | | |
|---|---|---|---|---|
| **Horticulture** | | | | |
| **Heavy rainfall with high speed winds in a short span[2]** | | | | |
| **Horticulture** | | | | |
| **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 : Not experienced / encountered**

| **Condition** | **Suggested contingency measure[o]** | | | |
|---|---|---|---|---|
| **Transient water logging/ partial inundation[1]** | **Seedling / nursery stage** | **Vegetative stage** | **Reproductive stage** | **At harvest** |
| **Horticulture** | | | | |
| **Continuous submergence for more than 2 days[2]** | | | | |
| **Horticulture** | | | | |
| **Sea water intrusion[3]** | | | | |

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

| **Extreme event type** | **Suggested contingency measure[r]** | | | |
|---|---|---|---|---|
| | **Seedling / nursery stage** | **Vegetative stage** | **Reproductive stage** | **At harvest** |
| **Heat Wave[p]** | | | | |
| **Horticulture** | | | | |
| **Cold wave[q]** | | | | |
| **Horticulture** | | | | |
| **Frost** | | | | |

| | | | | |
|---|---|---|---|---|
| **Horticulture** | | | | |
| **Hailstorm** | | | | |
| **Horticulture** | | | | |
| **Cyclone** | | | | |
| **Horticulture** | | | | |

### 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 | Arrange and Store hay in bulk<br>Use excessive fodder for making hay | -Use urea molasses treated roughage<br>-Use feed blocks prepared from crop residue<br>-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. |
| **Floods** | | | |
| Feed and fodder availability | - | | |
| Drinking water | | | |
| Health and disease management | | | |
| **Cyclone** | | | |
| Feed and fodder availability | | | |

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

[s] based on forewarning wherever available

**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** | | | | |
| 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 | |
| **Floods** | | | | |
| Shortage of feed ingredients | | | | |
| Drinking water | | | | |
| Health and disease management | | | | |

| | | | | |
|---|---|---|---|---|
| **Cyclone** | | | | |
| Shortage of feed ingredients | | | | |
| Drinking water | | | | |
| Health and disease management | | | | |
| **Heat wave and cold wave** | | | | |
| Shelter/environment management | | | | |
| Health and disease management | | | | |
| | | | | |

[a] based on forewarning wherever available

### 2.5.3 Fisheries/ Aquaculture

| | **Suggested contingency measures** | | |
|---|---|---|---|
| | **Before the event[a]** | **During the event** | **After the event** |
| **1) Drought** | | | |
| **A.** Capture | Prepare additional water reservoirs and exigency ponds | • Protect brood stock by making deep trenches in the middle of ponds.<br>• Provide aeration<br>• Stop feeding/restrict feeding | |
| 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 | | | |
| (ii) Impact of salt load build up in ponds / change in water quality | | | |
| (iii) Any other | | | |
| **2) Floods** | | | |
| **A.** Capture | | | |
| 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. Aquaculture** | | | |
| (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 | | | |
| **3. Cyclone / Tsunami** | | | |
| A. Capture | | | |
| 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. Aquaculture | | | |
| (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 | | | |
| **4. Heat wave and cold wave** | | | |
| **A. Capture** | | | |
| Marine | | | |
| Inland | | | |
| **B. Aquaculture** | | | |
| (i) Changes in pond environment | | | |

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

[a] based on forewarning wherever available