



**Government of India
Ministry of Agriculture
(Department of Agriculture & Cooperation)**

CRISIS MANAGEMENT PLAN

DROUGHT

(NATIONAL)

2011

Drought Management Division

INDEX

<u>S. No.</u>	<u>Contents</u>	<u>Pages</u>
1.	Evolving CMP	4-5
2.	Drought – a Crisis	6-10
3.	Crisis Management Framework	10-15
4.	Strategic Activity Planner	15-17
5.	Agencies responsible for identified activities	18-21
6.	Monitoring & Reporting of Drought	21
7.	Dissemination of Information and Media Management	21
8.	Crisis Management Group	21-22
9.	Nodal Officers	22
10.	Drought Management Contacts	22
11.	Conclusion	22-23
12.	Annexures 1 – 6	24-31

Crisis Management Plan

1. Evolving a CMP....

Crisis Management Plan (CMP) refers to the actionable programme, which is pressed into action in the event of a crisis situation to minimise damages to life, property and environment.

Being prepared to respond to a Crisis situation, helps in reducing the time taken to mobilize resources for an effective response. It also helps us to maintain cordial relations among stakeholders, enabling us to return to normal business operations more quickly. The goal of crisis management is to facilitate overall management of the crisis situation to minimize adverse impact on the community at large, maintaining individual and sovereign credibility and controlling and strengthening the Government's credibility with the public.

CMP helps us to develop preventive measures in a time bound manner and provides for continuous improvement in managing crisis situation. CMP ensures factual and timely communication of what needs to be done under specific circumstances to all the stake holders to minimise the losses.

The crisis recovery model based upon past experiences, on identified priorities and trigger-points with appropriate response matrix viz. contingency action plans of different agencies could be known as Crisis Management Plan (CMP). The identified priorities of CMP are to clarify the goals and define the roles and responsibilities of various responders (Ministries / Departments, Organisations and individuals) involved in crisis

management, and putting together a communication process for quickly notifying the Public in the event of a crisis.

The Plan outlined in this document does not replace the emergency procedures or contingency action plans already drawn by different agencies, but has been developed to address crisis situations that have the potential for a much greater impact on the Nation. Despite the fact that care has been taken to include all aspects of crisis management in the document, that still there may be occasions when an entirely new and unforeseen crisis situation could arise during the same type of crisis. Thus, it is necessary that the team of officers included in the Crisis Management Group (CMG) evolve a strategy to handle such unforeseen situations which can later be included as a part of the CMP as a continuing process.

This Crisis Management Plan (CMP) is part of overall spectrum of Drought Management Plan but is restricted to the management interventions required during the time of Crisis.



2. Drought - a Crisis

Generally, drought is not considered as a crisis of urgent nature but considered as a management issue. Drought is a natural, recurring climatic feature which stems from lack of rainfall over an extended period of time (i.e. a season or several years resulting in severe shortage of water resources). It occurs almost in all climatic regions of the world. Drought is a normal phenomenon in arid zone areas, a common phenomenon in semi-arid zone areas and a rare to very rare phenomenon in dry humid and humid areas. It is a natural disaster, which can be anticipated and also expected on the basis of rainfall pattern, temperature etc. In a large country like India having many agro-climatic zones, though drought cannot be prevented totally, its impact on the community at large can be minimized. The management of severe drought during 1987, 2002 and 2009 is a testimony to this fact.

Drought connotes a situation of water shortage for human, cattle and agriculture consumption resulting in economic losses, primarily in agriculture sector. Drought is classified as **Meteorological, Hydrological and Agricultural**. Unlike the Hydrological and Agricultural droughts, the **Meteorological Drought**, which connotes specific rainfall reduction below - 19% of normal rainfall, may not necessarily have any serious impact if the departure from normal is not significant and the rainfall is sufficient enough to sustain soil moisture.

In India, drought essentially occurs due to failure of south-west monsoon (June - September). Areas affected by drought need to wait till the next monsoon, as more than 73% of annual rainfall in the country is received during the SW Monsoon season.

The available data on rainfall indicate that -

- ❖ 16% of the Country's total area is drought prone and annually about 50 million people in the country are exposed to the crisis of drought;
- ❖ A total of 68% of sown area is subject to drought in varying degrees;
- ❖ 35% of area receives rainfall between 750 mm - 1125 mm and is drought prone;
- ❖ Most of the drought prone areas lie in the arid (19.6%), semi-arid(37%) and sub-humid(21%) areas of the country that occupy 77.6% of its total land area of 329 million hectares.
- ❖ Annual Average Rainfall is 1160 mm in India. However, 85% of rainfall is concentrated in 100-120 days (SW Monsoon)
- ❖ 33% of area receives less than 750-mm rainfall and is chronically drought prone;
- ❖ 21% area receives less than 750 mm rainfall (large area of Peninsular India and Rajasthan)
- ❖ Rainfall is erratic in 4 out of 10 years.
- ❖ Irrigation Potential is 140 Million Ha (76 MHa Surface + 64 MHa Groundwater)
- ❖ Depletion of Ground water and limitation of surface water imply that not all of net sown area is amenable to irrigation.
- ❖ Per Capita Water availability is steadily declining due to increase in population, rapid industrialization, urbanization, cropping intensity and declining ground water level. Problems are likely to aggravate.
- ❖ **Net Result - Inevitability of Drought in Some Part or Other.**

The mechanism for anticipating and managing droughts necessarily differs from similar arrangements concerning other disasters, natural calamities (like earthquakes, floods, cloudbursts, tsunami etc) or man-made disasters, for the following reasons:

- (i) Slow onset and prolonged course of droughts as against the other disasters, which have rapid onset, and a limited duration; and
- (ii) Early warning indicators in case of droughts are necessarily ambiguous because they may or may not culminate in a full-blown drought.

Government of India in 2002 decided to retain the issue of management of drought with the Department of Agriculture and Cooperation when it was decided to transfer the management of all other types of natural and man-made disasters to the Ministry of Home Affairs. Unlike other natural disasters its onset is slow but has a very serious impact on the economy due to its intensity and longer duration over a period of time.

State Government's primary responsibility:

The primary responsibility of managing drought (or any other natural disasters) is that of the respective State Governments. The role of Central Government is to supplement the efforts of the State Government in effective management of disasters and provide additional resources (food grains / financial assistance etc.) to combat the situation.

The risk management plan having early warning indicators in case of drought are ambiguous, as they may or may not culminate into a full-blown drought. In such situations the relief based management approach has to be launched to contain the impact of drought. Thus, it is to be understood that besides having a general risk management plan for handling drought with long-term and short-term approaches, we need to have a Crisis Management Plan (CMP) to deal with drought situation by the Central Government and the State Governments to minimize its impact.

Early indicators of Droughts...

The following constitute 'early warning indicators':

For Kharif (sowing June to August)

- i) Delay in onset of South-West Monsoon.
- ii) Long 'break' activity of South-West Monsoon.
- iii) Insufficient rains during the month of July.
- iv) Rise in Price of fodder.
- v) Absence of rising trend in Reservoir Levels.
- vi) Drying up of sources of Rural Drinking Water Supply.
- vii) Declining trend in the progress of sowing over successive weeks compared to corresponding figures for "normal years".

For Rabi (sowing November to January)

- i) Deficiency in closing figures for South-West Monsoon (30th September).
- ii) Serious depletion in level of Ground Water compared to figures for "normal years".
- iii) Fall in the level of Reservoirs compared to figures of the corresponding period in the 'normal years' - indication of poor recharge following SW Monsoon.
- iv) Indication of marked soil moisture stress.
- v) Rise in price of fodder.
- vi) Increased deployment of water through tankers

(For Tamil Nadu & Pondicherry the crucial period is North East Monsoon - October to December)

Other Seasons

For areas like Gujarat, Madhya Maharashtra, Marathwada and North Interior Karnataka the crucial period is March / April when due to chronic hydrological drought, many areas develop acute scarcity of Drinking Water.

For specific states and particular crops there are particular times in a year when progress of rains is of special significance e.g. February rains in Kerala for plantation crops.

3. Crisis Management Framework

It is the framework of crisis analysis aimed at identification of fundamental aspects of Crisis situation (Phases of crisis, magnitude, outcome of crisis [impact], trigger mechanism and strategic response matrix).

Level	Phases of Crisis	Vulnerability Magnitude (area specific) (Scale : Zero - 10)	Outcome of the Crisis Phase	Identified Trigger mechanism	Strategic Response Matrix / Action
1.	Normal	Zero. <i>(Rainfall is above +19% to -19% cumulatively for more than 4 weeks period through out the season)</i>	Nil	Nil	<ul style="list-style-type: none"> ➤ Developing and Strengthening drought preparedness ➤ assessing food and water requirements and resources, ➤ constant monitoring of drought-related characteristics ➤ Drawing up of perspective plans with the vision of drought proofing under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) Integrated Watershed Management Programme (IWMP) etc.
2.	Alert / Watch	1 - 2 Forecast of late onset of monsoon coupled with continuing water crisis and heat wave. Delayed onset of monsoon and anticipated	Incipient. Sudden acceleration of demand of employment.	<ul style="list-style-type: none"> • CAP (Crop) • CAP (Water) • CAP (Health) 	<ul style="list-style-type: none"> ➤ Preparation of updated Contingency Crop Plan and its propagation through effective agro-advisory services ➤ Propagation of short-term water conservation measures, water-budgeting, ➤ Proper health advisories and ensuring availability of emergency medical

		<p>deficit rainfall in the areas already affected by drought during the previous year.</p> <p>(Apr - Jun) <i>(Rainfall forecast is expected to be less than the normal rainfall and below -19% and the deficit continues for more than 2-3 weeks & Soil moisture level is unsustainable)</i></p>			<p>services</p> <ul style="list-style-type: none"> ➤ Continuation of ongoing alternative employment generation programmes in drought affected / prone areas, through MGNREGS as a part of supplementary employment and as a social safety net support under MGNREGS ➤ Monitoring over exploitation of ground water for non-agricultural and non-drinking purposes (i.e. industrial / commercial / entertainment purposes) <p>Advisory Note: (The ULBs may be directed to control the extraction of water)</p> <ul style="list-style-type: none"> ➤ Energising the Identified alternative sources for the requirement of water, food, fodder and power. ➤ Meeting of Crisis Management Group (CMG) to review and revitalise the role of concerned machineries.
3.	Warning	<p>3-4 Delayed onset of monsoon. Deficit Rainfall for more than two weeks. Acute water crisis. (Jun - Mid July) <i>(Rainfall is less than the normal rainfall and below -19% and the deficit continues for more than 3 - 6 weeks & Soil moisture, GW & SW level is lower than previous normal average)</i></p>	Moderate	<ul style="list-style-type: none"> • CAP (Crop) • CAP (Water) • CAP (Health) • CAP (Food & PD) 	<ul style="list-style-type: none"> ➤ Effective role of Extension machinery and realising the objectives of Contingency Crop Plan by ICAR. ➤ Operationalising short-term water conservation measures by municipal and district agencies, water-budgeting by the Ministry of Water Resources (Irrigation), M/o Urban Development (PHED) and by Drinking Water & Sanitation <p>Advisory Note: Identify alternative sources when the town is in "Warning" period and the supply of water may be restricted to 70 lpcd instead of 135 lpcd)</p> <ul style="list-style-type: none"> ➤ Judicious use of drinking water (restricted supply of water for basic

					<p>requirement and alternative non-potable water for other purposes)</p> <ul style="list-style-type: none"> ➤ Meeting of CMG to review the action plan initiated by line Departments and affected State Governments and taking decision for movement of water and fodder from surplus areas (States) to the deficit areas (States). ➤ Review and Visit by Area Officers in the deficit rainfall States. ➤ Apprising the developments to National Crisis Management Committee (NCMC) ➤ Action Plan for meeting out the shortage of secondary and tertiary sectors
4.	Emergency	<p><u>5-7</u></p> <p>Deficit or No rainfall during the sowing period. Mid-season withdrawal of monsoon. Dry spell for more than 4 weeks. Deficit rainfall in the range of -20% to -40%. Wilting of Crops due to shortage of water and continuing heat wave conditions. (JUL -SEP)</p> <p><i>(Rainfall is less than the normal rainfall and below -25% and the deficit continue for more than - 6 weeks & Soil moisture, GW & SW level is</i></p>	Severe	<ul style="list-style-type: none"> • CAP (Crop) • CAP (Water) • CAP (Cattle Care) • CAP (Health) • CAP (EGP) • CAP (Food & PD) • 	<ul style="list-style-type: none"> ➤ Referring the issue to NCMC for taking up with Cabinet for taking certain vital decisions like deferment / rescheduling / fresh loan, movement of water and fodder through railways, additional allocation of food grains, establishing cattle camps, alternative employment generation programmes, enhancing PDS allocations, import of food grains to meet the gap between demand and supply, checking up of inflation etc. <p><u>Advisory Note:</u> In the 'Emergency' period, water may be supplied at 40 lpcd and non-potable water may be supplemented for other uses.</p> <ul style="list-style-type: none"> ➤ Early release of instalments under CRF and ensuring that the State Governments utilise it for initial emergency measures. ➤ Enabling employment under MGNREGS as a

		<i>alarmingly low).</i>			<p>part of supplementary employment and as a social safety net support.</p> <ul style="list-style-type: none"> ➤ Monitoring and visit of deficit rainfall States personally by each designated area officer in the Department Apprising the developments to National Crisis Management Committee (NCMC) on regular basis ➤ Measures for meeting the shortage of secondary and tertiary sectors
5	Acute (Potential Disaster)	<p>7-10</p> <p>Early withdrawal of monsoon. Midseason withdrawal.. Severe deficit of cumulative annual rainfall. Severe soil moisture deficit. No rainfall for more than 4-6 weeks in sown area, resulting in crop damage Severe shortage in availability of GW and SW.</p> <p>(JUL-OCT) <i>(Rainfall is less than normal and below -25% and the deficit continue for more than - 6 weeks & Soil moisture, GW & SW level is alarmingly low).</i></p>	EXTREME (FULL BLOWN DROUGHT)	<ul style="list-style-type: none"> • CAP (Water) • CAP (Cattle Care) • CAP (Social Sector) • CAP (Energy Sector) • CAP (Health) • CAP (Food & PD) • CAP (Labour & Employment) 	<ul style="list-style-type: none"> ➤ Decision by Cabinet for Constitution of GoM / Task Force under the chairmanship of a Union Minister of Cabinet rank to take decisions during acute crisis ➤ Monitoring of drought affected States individually by each designated area officer in the Department about ongoing relief measures. ➤ Weekly CMG meeting and monitoring of the progress of drought relief measures ➤ Review of visit by Area Officers to the deficit rainfall States. ➤ Strict Water conservation measures and monitoring of the release of canal water for irrigation ➤ Constitution of Central Teams to visit to drought declared States. ➤ Assessment of damages and estimation of losses for release of funds from National Disaster Response Fund (NDRF) (formerly NCCF) ➤ Special assistance to farmers / dairy / poultry / fishery sectors ➤ Enabling employment under MGNREGS as a part of supplementary employment and as a

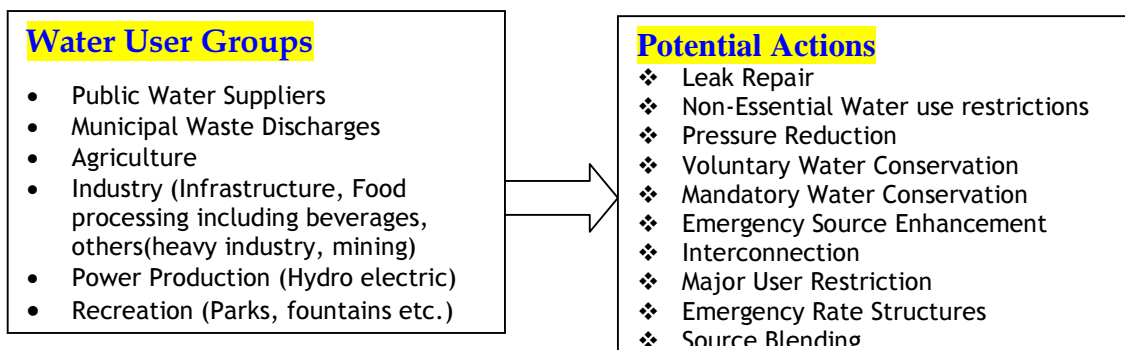
					<ul style="list-style-type: none"> ➤ social safety net support ➤ Revitalising the ongoing programmes for vulnerable sections of society ➤ Preventive measures for loss of human /cattle life on account of potential disaster. ➤ Measures for meeting the shortage of secondary and tertiary sectors and measures for economic revival. ➤ Legislative measures like issue of control orders for maintaining sustained supply of essential commodities. ➤ Video Conferencing with drought affected States.
6	Recovery (Post Disaster)	<p><u>>10-0</u> (OCT-JUN)</p> <p><i>Normal rainfall in Rabi and subsequent seasons. Easing of soil moisture stress situation Farming /Rural community's livelihood requirements Returning to normal activity.</i></p>	<u>Mitigated</u>	<ul style="list-style-type: none"> • CAP (Water) • CAP (Cattle Care) • CAP (Energy Sector) • CAP (Health) • CAP (Employment Guarantee Programmes) • CAP (Food & PD) • CAP (Labour & Employment) 	<ul style="list-style-type: none"> ➤ Rescheduling of farm loans ➤ Early release of input subsidy ➤ Payment of compensation for losses in time to the beneficiaries i.e. agri-insurance, NDRF / State Disaster Relief Fund SDRF (formerly CRF) benefits etc. ➤ Adequate availability of seeds for sowing in the next season ➤ Monitoring of the ongoing relief measures and taking necessary course correction ➤ Simultaneous documentation ➤ Monitoring of the climate and ensuring alternative arrangements against relapse of the drought.

Note: **Contingency Action Plans (CAP)** (in respect of Crop, Water, Cattle Care, Health, Energy Sector, Food and livelihood Security) - (To be prepared by concerned Central Government Ministries / Departments)

“The effective preparedness and prevention of the crisis in agriculture is the foremost important task before the Government at Centre and State levels

during the paradigm of Drought Management. Preparation and implementation of an effective Crop Contingency Planning would address the mitigation of crisis in agriculture. The Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad under ICAR has been preparing district-wise contingency plans in collaboration with State Agricultural Universities (SAUs) / Indian Council of Agricultural Research (ICAR) institutes / Krishi Vigyan Kendras (KVKs). The district-wise contingency plans for selected districts in respect of Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Rajasthan and Tamil Nadu are now available in the website of the Department www.agricoop.nic.in.

Specific Attention to Water User Groups:



4. Strategic Activity Planner

Activity	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
DROUGHT PREPAREDNESS												
Reviewing CMP												
Monitoring												
Rainfall												
Temperature												
Surface water level												
Normal Area Vs Sown area												
Assessment												
Drinking water availability												
Irrigation water availability												
Soil Moisture												
Fodder availability												
Food grains availability												
Energy Sector requirement												
Inputs and Seed												

availability													
Water Conservation measures													
Check dams / Water sheds													
<i>Activity</i>	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
Rain Water Harvesting													
Ground Water Recharge													
Protection of aquatic resources for aquaculture													
DROUGHT REPORTING													
Early Warning System (EWS)													
Forecast of Contingency Cropping													
Forecast of Crop Loss													
Forecast of Water Deficiency													
Forecast of Food insecurity													
Forecast of Cattle feed deficit													
Declaration of Drought													
Estimation													
Unsovn area													
Crop Loss due to drought													
Potential Water deficit													
For irrigation													
For drinking													
Fodder requirement, availability, additional demand for cattle care													
Loss to AH/ Fisheries													
Loss to Energy Sector (fuel and hydroelectricity)													
DROUGHT RESPONSE													
Propagation of Forecast through Extension Services													
Propagation of contingency cropping													
Promotion of agro forestry													
Issue of Agro advisories													

Issue of General advisories												
CRF release												
<i>Activity</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>
<i>Activity</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>
Alternative employment												
Food Security to vulnerable Sections												
Food grain requirement of farming community												
Processing of request for additional financial assistance												
Water and Fodder movement												
Energy Sector requirement (Import / Indigenous procurement from outside the State)												
Cattle & animal welfare (Vet.)												
Cattle camp												
Encouraging of community welfare organizations for mitigation efforts and monitoring of their activity												

5. Agencies responsible for Identified Activities

<i>Activity</i>	Primary	Secondary	Tertiary
Monitoring			
Reviewing CMP	DAC	MHA / NDMA	NCMC
Rainfall	IMD	States	Dept. of Agriculture and Cooperation (DAC)
Temperature	IMD	States	DAC
Surface water level	CWC / MoWR	States	DAC
Ground Water level	CGWB / MoWR	States	DAC
Monitoring of Agricultural Drought	States	IMD / NRSC / ICAR Institutes	DAC
Assessment			
Drinking water availability	States	DWS MoWR (CGWB) / PHED (MoUD)	DAC
Irrigation water availability	States	MoWR	DAC
Soil Moisture	States	NRSC / IMD / MoWR (Irrigation Wing)	DAC (NRM Division)
Fodder, cattle feed and poultry feed availability	States	Do AH&D	DAC
Food grains availability	States	D/o F&PD	DAC
Energy Sector requirement	States	M/o Power / Petroleum & Natural Gas	DAC
Inputs and Seed availability	States	State / National agencies / corporations for Seeds/ Fertilizers / Pests & Insecticides	DAC (Seeds PP & INM Div) / D/o Fertilizers
Water Conservation measures			
Check dams / Water sheds	States	DAC / RD (LR) / MoWR	DAC (NRM Division)
Deficit irrigation, Sprinkler and drip irrigation, reuse of irrigation water, use of water of suboptimal quality	States	MoWR (Irrigation Wing)	DAC
Rain Water Harvesting & Water Shed Management	States	MoWR / CGWB	DAC
Ground Water Recharge	States	CGWB	MoWR
Adjustment in sanction water / Water Pricing	States	CWC	MoWR
Monitoring of Water levels in Head works such as Jack wells and Tubewells	ULB / Implementing Agency	Public Health Engineering Department / State Governments	DAC

Judicial use of available water	ULB / Department in-charge of O&M	Public Health Engineering Department / State Governments	MoWR
Planning of naturally drought restraint crops with less water consumption and duration	States	ICAR / Directorate of Extension	DAC (Crops Division)
Water Supply system for drought prone areas for arranged supply of water to commercial and industrial activities having low water consumption	States	CWC	MoWR
Reduction in conveyance loss, evaporation from soil surface, renovation and percolation of tanks, water consciousness	States	CWC	MoWR
Early Warning System (EWS)			
Forecast of Contingency Cropping	States	ICAR / DAC (Extn.)	DAC
Forecast of Crop Loss	States	ICAR / DAC (Extn.)	DAC
Forecast of Water Deficiency	States	MoWR / DWS	DAC
Forecast of Food Insecurity	States	D/o Food & PD	DAC
Forecast of Cattle feed deficit	States	D/o AHD	DAC
Declaration of Drought Estimation	States		
Normal Area Vs sown area	States	DAC	
Un-sown area	States	DAC	
Crop Loss due to drought	States	DAC	
Loss to Animal Husbandry & Fisheries Sector	States	DoAHD&F	
Potential Water deficit			
For irrigation	States	MoWR	DAC
For drinking	States	DWS	DAC
Fodder / cattle feed / poultry feed requirement, availability, additional demand for cattle care	States	DoAHD&F	DAC
Loss to Energy Sector and Requirement of Energy Sector	States	Power / Petroleum & Natural Gas	DAC

Drought Mitigation			
Propagation of Forecast through Extn. Services	Extensions Agencies / KVKs	States	DAC
Propagation of contingency cropping	States	ICAR	DAC
Intensification of agricultural activities with support from Centrally Sponsored Schemes	Respective Missions / agencies	States	DAC
Additional Availability of seeds and other inputs	Respective agencies / corporations	States	DAC
Credit Support	Agriculture Coop Banks / Nationalised & Scheduled Banks NABARD / RBI	States	DAC
Propagation of agro forestry	States	M/o E&F	DAC
Issue of Agro advisories	States	DAC	
Issue of General advisories	States	DAC	
SDRF release	M/o Finance	States	
Alternative employment	States	D/o Rural Development	DAC
Food Security to vulnerable Sections	States	M/o WCD / SJ & E / RD	DAC
Food grain requirement of farming community	States	D/o F&PD	DAC
Request for additional financial assistance from NDRF etc.	States	DAC	HLC / M/o Finance
Water and Fodder movement	States	Railways	DAC
Packaged / Bottled potable water	States	D/o DWS, WCD, SJ&E, RD	DAC
Energy Sector requirement	States	Power / Petroleum & Natural Gas	DAC
Cattle & Animal Welfare (Vet.)	States	D/o AH,D&F	DAC
Cattle camp	States	D/o AH,D&F	DAC
Monitoring and encouraging of NGOs / VOs	States	Rural Development	DAC
Taking over of the exploratory wells in drought prone areas	States	CGWB	MoWR
Adoption of traditional methods of water storage and completion of ongoing storage projects	States	CWC	MoWR
Undertaking Mid/ Long - Term Drought Mitigation activities	District Administrations	Respective Departments in States	Ministry/ Department of Panchayati Raj,

under Centrally Sponsored Programmes for water shed, Backward Regions, Drinking Water Supply, infrastructure			Land Resources Drinking Water Supply, Rural Development, Agriculture
--	--	--	---

6. Monitoring & Reporting of Drought

Government of India has designed and launched an interactive web portal for online reporting of drought related information in prescribed MIS format, which is available at <http://dacnet.nic.in/droughtmis>. All States shall utilize the web portal and enter all drought related information for monitoring drought and planning for mitigation.

7. Dissemination of Information and Media Management

Sharing information with print, radio and television media is an important aspect of drought management. The Central and State Governments should provide information on all aspects of drought to the people and media.

Designated Spokespersons of Governments should be accessible to media for providing information on drought, for which a communication outreach strategy may be adopted. They should organise periodical briefings for dissemination of information.

Additional Director General dealing with Agriculture in the Press Information Bureau, Ministry of Information and Broadcasting, Government of India would interact and disseminate periodical information to the media on the drought related information as made available by the Additional Secretary and Central Drought Relief Commissioner, Department of Agriculture and Cooperation, Government of India.

8. Crisis Management Group

There shall be a Crisis Management Group (CMG) for Drought Management as is defined in the Crisis Management Plan (National) to deal with various phases of drought. The composition of the CMG for Drought is at **Appendix I**. Joint Secretary (Drought Management), the nodal officer nominated by the Department of Agriculture & Cooperation to coordinate with NCMC will be the Member-Secretary of CMG. CMG under the Chairmanship of Additional Secretary & Central Drought Relief Commissioner would periodically review the drought preparedness, take appropriate decisions and report the developments to the Agriculture Secretary and to National Crisis Management Committee (NCMC). The

issues to be decided by the Cabinet would be referred to NCMC for further necessary action by the Cabinet Secretariat.

At State level, a similar set up as envisaged for the Centre shall be made to review the crisis of drought.

At District level, the District Magistrate / Collector would be the head of the Crisis Management Group to deal the issue at sub-district / block / Taluk level.

9. Nodal Officers

Besides State Relief Commissioners and State Agriculture Secretaries, line Departments / Ministries/ offices / agencies of the Central Government, responsible for different sets of activity connected with crisis management of drought shall nominate an officer not below the rank of Director or equivalent in the Government of India. The list of nodal officers containing their name, designation, telephone (office / residence), FAX, e-mail, mobile number and address shall be maintained in the Drought Monitoring Cell (Control Room) of the Department of Agriculture & Cooperation, Government of India and got updated every month.

At District level, the District Magistrate / Collector would be the nodal officer of the drought affected district, who will be co-opted in the drought management spectrum at the time of acute crisis in their district.

10. Drought Management Contacts

- Composition of Crisis Management Group (CMG) - **Appendix-1**
- List of Nodal Officers of Line Ministries / Departments - **Appendix-2**
- List of Officers of Drought Management Division- **Appendix-3**
- **Drought Emergency Response Mechanism - Institutional Arrangements & Responsibilities - Appendix-4**

11. Conclusion

The aim of the CMP (Drought) is to help all stake holders to be better prepared and less vulnerable to drought. It will also result in a timely and effective response by government agencies to reduce impacts during a drought crisis. The strategic activity planner and identification of agencies responsible for managing the crisis is aimed at demarcation of the duties of respective personnel in the identified activity.

This plan enables the officials who are responsible to focus their efforts on emerging crisis situations, which may require a unique response. As much as decisions are taken in advance of a Crisis, it would make it possible that the remaining decisions are taken easily through the Crisis. However, existence of a National level mechanism and a holistic and integrated drought management plan would reduce the focus of the Crisis Management Plan (CMP) towards relief and rehabilitation in the event of full blown drought.



LIST OF MEMBERS OF CRISIS MANAGEMENT GROUP

1. **Chairman** - Special Secretary & Central Drought Relief Commissioner

2. **Members –**
Nodal Officers of Line Ministry / Departments:
 - i. D/o Animal Husbandry, Dairying & Fisheries
 - ii. D/o Drinking Water and Sanitation
 - iii. M/o Earth Sciences
 - iv. M/o Environment & Forests
 - v. D/o Food & Public Distribution
 - vi. M/o Health & Family Welfare
 - vii. M/o Home Affairs
 - viii. India Meteorological Department
 - ix. M/o Labour & Employment
 - x. M/o Panchayati Raj
 - xi. M/o Petroleum & Natural Gas
 - xii. M/o Power
 - xiii. M/o Railways
 - xiv. D/o Rural Development
 - xv. M/o Urban Development
 - xvi. M/o Water Resources
 - xvii. M/o Women & Child Development

3. **Member Secretary – Joint Secretary** (Drought Management)

Appendix -2

**LIST OF NODAL OFFICERS OF THE LINE MINISTRIES /
DEPARTMENTS**

S. No	Name of the Ministry / Department & Address	Details of Nodal Officer / Alternate Nodal Officer
1.	D/o Animal Husbandry, Dairying & Fisheries Krishi Bhavan, New Delhi	Shri A. Nanda Kumar, Director (SS), Room No. 532-A, Krishi Bhawan, New Delhi. Tel: 23070149
2.	D/o Drinking Water and Sanitation, CGO Complex, Paryavaran Bhavan, Lodhi Road, New Delhi	Shri T. M. Vijay Bhaskar Joint Secretary Tel : 24361043 Fax : 24364113
3.	M/o Earth Sciences Mahasagar Bhavan, Block No.12, CGO Complex, Lodi Road, New Delhi-110 003	Dr. K.J. Ramesh Scientist G / Adviser (Multi Hazards) Tele fax – 24622059 Tele Res - 24677374 Mobile – 9868733464 Block No.12, CGO Complex, Lodhi Road, New Delhi. E-mail : kj.ramesh@nic.in , kjramesh26@gmail.com
4.	M/o Environment & Forests 7 th Floor, Paryavaran Bhavan, CGO Complex, Lodi Road New Delhi – 110 003	Shri N. C. Saravanan Assistant Inspector General of Forests National Afforestation and Eco- Development Board , M/o Environment & Forests, Tele : 24364981 Fax : 24361704
5.	D/o Food & Public Distribution Krishi Bhavan, New Delhi	1) Shri Rakesh Garg Join Secretary (Policy & FCI) 194, Krishi Bhawan, New Delhi. Tel : 011-23381177 (o) 23389458 (R) 2) Shri N. K. Maurya Joint Director (Movement) 011-23382709 (o) 011-24673145 (R)

6.	M/o Health & Family Welfare Directorate General of Health Services (EMR) Nirman Bhavan, New Delhi	Dr. P.R. Ravindran Director (EMR) Tel. No. 23061302 Fax : 23061457
7.	M/o Home Affairs, 1 st Floor, Lok Nayak Bhavan, Lodi Road New Delhi	1) Shri Dev Kumar, Director (NDM-I) Tel: 24642853 (Telefax), 26266708@, 9871087616 (Mob.) Email :- dirdm1@nic.in 2) Shri J. P. Misra Director (NDM-II) Tel : 24622543 Res : 24100688 Email : dirdm4-mha@nic.in
8.	India Meteorological Department Mausam Bhavan, Lodi Road, New Delhi	Shri B.K. Bandopadhyay DDGM (Services) Tel. No.24635664 E-mail : bkbando1705@yahoo.co.in <u>Alternate Nodal Officer</u> Shri Awadhesh Kumar, Scientist 'E' Tel. No. 24611068 E-mail : awdk54@gmail.com
9.	M/o Labour & Employment Shram Shakti Bhavan, New Delhi	Shri R. L. Singh Director Tel : 23715137
10.	M/o Panchayati Raj Sardar Patel Bhavan, New Delhi	Shri Avtar Singh Sahota Joint Secretary Tel : 23747910 Fax: 23747930
11.	M/o Petroleum & Natural Gas, Shastri Bhavan, New Delhi	Ms. Rashmi Aggarwal Director (Distribution) Room No. 205, 'B' Wing 2 nd Floor, Shastri Bhawan, New Delhi. Tele : 23385359 Fax : 23383100 Res: 23070188 Email : rashmi.aggarwal@nic.in
12.	M/o Power Shram Shakti Bhavan, Rafi Marg	Shri Sudhir Kumar Joint Secretary (OM) Tel : 23710389 (O)

	New Delhi	<p>23731266 (Fax) 26876633 (R) Email : sudhir.k@nic.in</p> <p><u>Alternate Nodal Officer</u> Shri A.K. Saxena Director (OM), Room No. 219 Tele : 23716674 (o), 26266166 ® E-mail : akumar.saxena@nic.in</p>
13.	M/o Railways Railway Board Rail Bhavan, New Delhi	<p>Shri I. Jeyakumar Joint Director Traffic Trans (POL) Tel : 23384641</p> <p>Shri Sandeep Jain Director, Safety -III Tel : 23385836</p>
14.	D/o Rural Development Krishi Bhavan, New Delhi	<p>Ms. Indu Sharma Director (MGNREGA) Room No. 250, Krishi Bhawan, New Delhi. Tel : 23388431 Mobile : 98187973322 Email : parashindu@yahoo.co.in</p>
15.	M/o Urban Development (CPHEEO) Nirman Bhavan, New Delhi	<p>Shri M. Sankaranarayanan, Dy. Adviser (PHE) Tel : 23061571 Fax : 23062559</p> <p>Shri M. Dhinadhayalan Deputy Adviser (PHE) Room No. 654, A Wing, Nirman Bhawan, New Delhi Tel : 23062418 Fax : 23062559</p>
16.	M/o Water Resources, Block No.11, 8 th Floor, CGO Complex, Lodi Road New Delhi	<p>Dr. Samir Chatterjee Sr. Joint Commissioner Block No.11, 8th Floor, CGO Complex, Lodhi Road, Telefax : 24392539</p> <p><u>Alternate Nodal Officer :</u> Shri Vineet Gupta Director Water Management Directorate Central Water Commission, Room No. 225 (S), Sewa Bhawan, R. K. Puram, New Delhi. Tel: 26107403 (O) Email : vineet_cwc@yahoo.co.in</p>

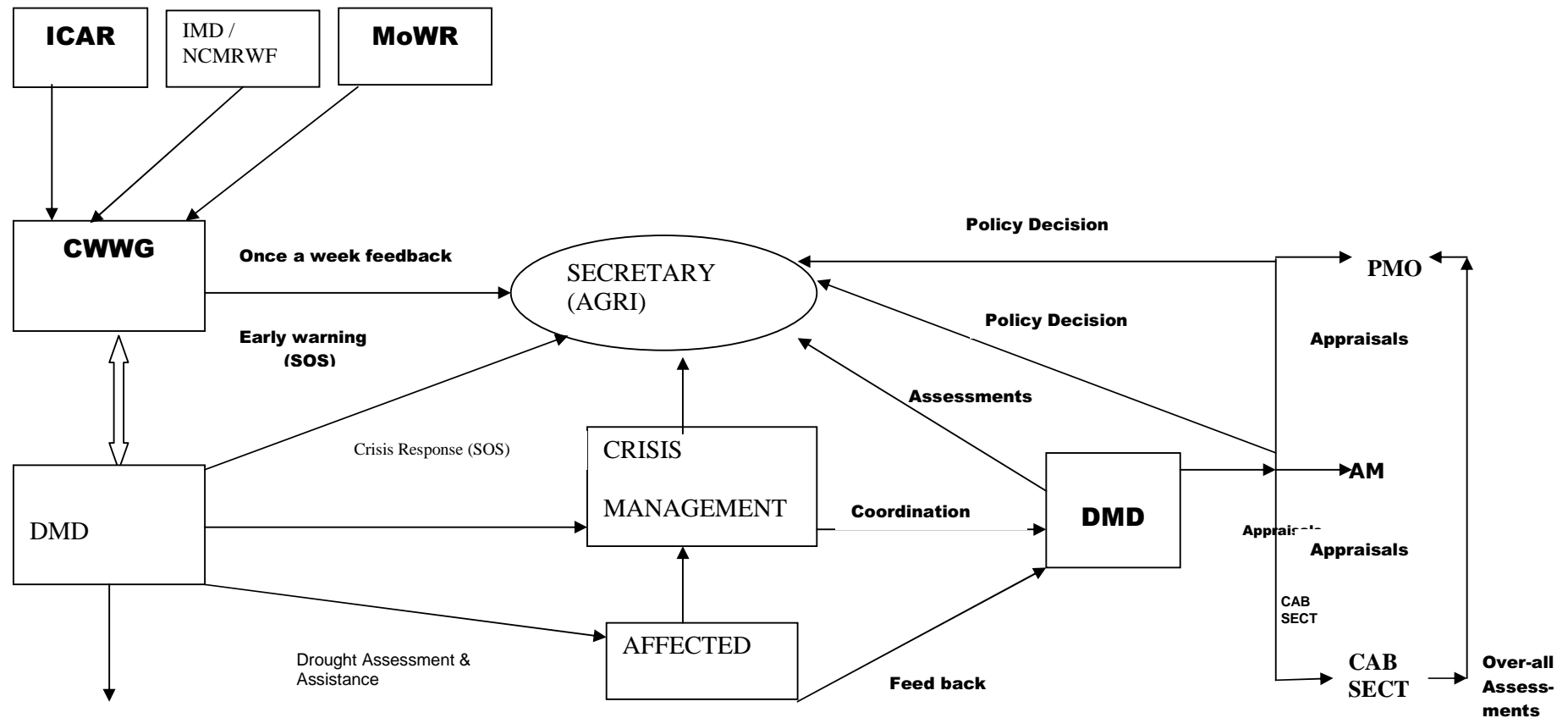
17.	M/o Women & Child Development Shastri Bhavan, New Delhi	Shri A. P. Shrivastava Deputy Secretary (CDN) Room No. 305, 'B' Wing, Shastri Bhavan. Tel. No. 23385192 (o), Email: ap.srivastava@nic.in
-----	---	---

Appendix-3

DETAILS OF OFFICERS OF DROUGHT MANAGEMENT DIVISION

S. No.	Name & Designation	Room No.	Telephone	E-mail
1	Shri A. S. Lamba Special Secretary & Central Drought Relief Commissioner	147	23389348 23381305 (F) 26196963 (R)	aslamba@rediffmail.com
2	Shri Atanu Purkayastha Joint Secretary	138	23381503 23387669 Fax	jsdm-agri@nic.in
3.	Shri V. B. Dubey Director	248	23388606	vinoy.dubey@nic.in
4.	Shri Promode Kumar Under Secretary	385B	23385957	
5.	Shri S.V. Patil Under Secretary	22	23389453 23384555 (F)	drought.krishi@nic.in
6.	Shri Rajnandan Kumar Section Officer (DM Section)	387	23383309	
7.	Drought Monitoring Cell (Control Room)	22	23389453 23384555(F)	drought.krishi@nic.in

DROUGHT EMERGENCY RESPONSE MECHANISM – Institutional Arrangements & Responsibilities-(Synoptic view)



- Assessment
- Sanction
- Coordination
- Relief
- Documentation

Legend: AM- Agriculture Minister; CWWG- Crop Weather Watch Group; Cab Sect- Cabinet Secretariat; DMD-Drought Management Division; MoWR- Ministry of Water Resources; ICAR-Indian Council of Agricultural Research; NCMRWF-National Centre for Medium Range Weather Forecasting; PMO- Prime Minister's Office – SOS- When Need Arises