



Date :

No. RD/366/TNR/2023

Dear Shri Narendra Singh Tomar ji,

I am writing to bring to your attention a matter of utmost importance concerning the stringent parameters prescribed in the Manual for Drought Management-2016as updated in 2020 for the declaration of drought by the State governments. I firmly believe that it is crucial to re-evaluate the current parameters for drought declaration to accurately respond to the dire situation arising due to erratic weather conditions propelled by Climate Change and its adverse impact on our farmers and the agricultural sector.

The last few years have witnessed unprecedented challenges and adverse weather conditions, mainly driven by Climate Change, affecting various aspects of our lives, particularly in Karnataka where agriculture is a significant source of livelihood. The increasing frequency and intensity of droughts have had severe consequences, including crop failures, water scarcity, and socio-economic hardships for rural communities.

In the current South West Monsoon season, Karnataka has recorded 234 mm as against a normal rainfall of 336 mm, with -34% deficiency. This was also in the backdrop of delayed arrival of Monsoon and a deficit of -56% in June due to weak Monsoon. Throughout this season, the rainfall distribution and intensity has been erratic. Despite drought-like conditions in several Taluks we have not been able to meet the existing parameters for declaring drought, which is leaving our farmers without critical support such as input subsidy required in the event of failure to commence sowing operations /mid-season crop failure after sowing due to weak rains apart from other drought management/mitigation measures as set out in the Manual.

While the existing drought declaration parameters as set out in the revised Drought Manual have served as important guidelines for assessing and responding to drought situations, they may need to be revised to reflect the diverse 14 agro-climatic zones in the State, each facing distinct challenges. The current one-size-fits-all approach to drought declaration is not capturing the nuances and variations in

different regions. It is important to develop region-specific criteria that consider local ecological factors, water availability, and agricultural practices. Here are a few other key considerations that may be taken into account:

A: Mandatory Indices:

1. **Factoring erratic distribution of monsoon:** The manual integrates meteorological, agricultural and hydrological drought which is not necessarily the situation always. Though meteorological drought is a mandatory indicator and precursor to the other two, rainfall deficit in early monsoon season can recover later due to back to back strong monsoon low pressure systems as is increasingly seen in the last few years during months like August-September. In such a case, scanty rainfall in the first half of the sowing season impacts agriculture and triggers agriculture drought. However, the rainfall recovery is so strong that there cannot be a meteorological or hydrological drought, but agricultural drought remains. This critical aspect should be factored by providing flexibility under mandatory indicators for rainfall deviation. Further, it is seen that IMD declares deficiency of - 10% rainfall over the country for the year as a whole as drought year in the country. But, for declaration of drought by the State the mandatory index, ie, Rainfall deviation of more than -60% is considered as trigger. Hence, Rainfall Deviation index ranging from -20% to -59% may be considered as Mandatory trigger for drought declaration.
2. **Redefining dry spell:** The manual rigidly defines dry spells assuming its impact on agriculture would be similar everywhere and in all time scales. Factors like type of soil, type of crop, temperatures and vegetative state equally matter. Hence, even a dry spell of two weeks with other factors like temperature can hamper the crop growth and cause irreversible crop damage. Therefore, lower than two weeks consecutive dry spell should be considered under rainfall related indices instead of 3-4 weeks.
3. The early declaration of drought has been made difficult due to the condition imposed in the manual (refer para 3.2.3.1) that sowing has to be completed and a declaration has to be given by the State Governments stating that “no further sowing is expected” in regions affected by drought, which is contrary to the input subsidy concept of immediate relief and restart of economic activity and prevents the state government from undertaking immediate relief and mitigation.

B: Impact Indicators:

4. Hydrology-GWDI: Even though there is meteorological/agriculture drought, it may not impact the ground water levels immediately. Hence, Ground Water Drought Index (GWDI) may not appropriately capture the groundwater levels as there is significant lag effect (ranging from 2 to 3 years) to reflect depletion or rise in ground water. The weightage for GWDI may be appropriately looked into.
5. Remote Sensing indicator: Normalized Difference Vegetative Index(NDVI): NDVI is a satellite derived index which depends on cloud free high resolution satellite imagery, which is a challenge during Monsoon season. Weeds in unsown areas are also reflected as biomass giving false (inaccurate) vegetative index which will have a negative impact in the assessment of parameters for drought declaration.
6. Soil Moisture-Impact Indicator: It is practically difficult to assess crop wise, soil type wise, local specific moisture adequacy, mostly relying on generic value. Hence, weightage for the soil moisture indices may also be appropriately looked into.

C: Other related issues

Bringing in parity in crop loss criteria qualifying for input subsidy between Manual for Drought Management-2016 as amended from time to time and prevailing items and norms of assistance: The Manual sets out more than 50% crop loss to be categorized as severe, whereas, as per the prevailing items and norms of assistance issued by Ministry of Home Affairs, crop loss of more than 33% due to notified disaster qualifies for payment of input subsidy from SDRF/NDRF. Hence, the manual may be aligned with the SDRF/NDRF norms.

8. **Synchronizing the timeline of PMGSY/Crop Insurance payment with input subsidy (relief assistance) :** Insurance plays a crucial role in mitigating the risks associated with agricultural activities. However, due to the current system's disjointed nature, farmers often face difficulties in accessing insurance claims they are eligible for. It is therefore urged to synchronize the timeline of crop insurance disbursement with input subsidy (relief assistance). Disbursement of input subsidy should be taken as proof of damage and loss by the insurance companies and should automatically trigger the whole insurance claim payment due to the affected farmer. By integrating these two systems, we can ensure that the farmers receive timely and adequate financial support during times of crisis. This coordination will not only simplify the process for farmers but also reduce the timelag between insurance claim and disbursement and enhance transparency and accountability.


While it is understandable that the norms for drought declaration are established to ensure accurate assessments and appropriate allocation of resources, it is essential to recognize that each State and the regions within the State have their unique challenges and requirements. The current situation demands a more flexible approach to the existing norms, taking into account the long-term implications of prolonged water scarcity on agriculture and the livelihoods of our farmers.

Therefore, I request your kind intervention to review the current parameters for declaring a drought and consider amending the drought declaration parameters in the light of above suggestions.

I am confident that, by revisiting and potentially revising the current parameters, we can establish a more responsive framework that acknowledges the realities of each State and offers timely assistance to the farmers in particular. Your support in this endeavor would not only alleviate the sufferings of our farmers but also demonstrate a commitment to the well-being of our people in the drought affected regions.

With warm regards,

Yours sincerely,


(Siddaramaiah)

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