REPORTABLE

IN THE SUPREME COURT OF INDIA

CIVIL ORIGINAL JURISDICTION

WRIT PETITION (CIVIL) NO. 857 OF 2015

Swaraj Abhiyan – (I) ….Petitioner

versus

Union of India & Ors. ….Respondents

J U D G M E N T

Madan B. Lokur, J.

Lokmanya Tilak said:

"The problem is not lack of resources or capability, but the lack of Will."

1. This lack of Will is amply demonstrated in this public interest litigation under Article 32 of the Constitution, in which the States of Bihar, Gujarat and Haryana are hesitant to even acknowledge, let alone address, a possible drought-like situation or a drought by not disclosing full facts about the prevailing conditions in these States. A candid admission does not imply a loss of face or invite imputations of ineffective governance – it is an acknowledgement of reality. An ostrich-like attitude is a pity, particularly since the persons affected by a possible

drought-like situation usually belong to the most vulnerable sections of society. The sound of silence coming from these States subjects the vulnerable to further distress. During the hearing of this public interest petition, no one alleged a lack of effective governance, only the lack of an effective response and therefore we are at a loss to understand the hesitation of these States. Ironically, towards the fag end of the hearing, Gujarat finally admitted the existence of a drought in five districts – a fact that could have been admitted much earlier. But at least, it is better late than never. However, Bihar and Haryana continue to be in denial mode.

2. It is not as if a drought is required to be declared in the entire State or even in an entire district. If a drought-like situation or a drought exists in some village in a district or a taluka or tehsil or block, it should be so declared. The failure of these States to declare a drought (if indeed that is necessary) effectively deprives the weak in the State the assistance that they need to live a life of dignity as guaranteed under Article 21 of the Constitution.

3. To compound the problem, the Union of India has introduced the concept of 'federalism' and canvasses the view that a disaster requires the Union of India to primarily provide financial assistance and any other assistance if it is sought by the State Government. A declaration of drought and its management is really the concern of the States. Surely, if a State Government maintains an ostrich-like attitude, a disaster requires

a far more proactive and nuanced response from the Union of India. Therefore, in such a state of affairs the question that needs to be asked is: Where does the buck stop?

4. In this decision and for the present, we propose to deal only with the submissions relating to the prevailing drought situation or the drought-like situation in the States before us since there is some urgency in deciding it. We shall deal with the other issues raised by the petitioner in subsequent decisions as they are in a sense quite disparate, though linked to the drought situation or the drought-like situation.

Background

5. The petitioner Swaraj Abhiyan has filed this public interest petition under Article 32 of the Constitution. Before taking up the case for final hearing, we put it to learned counsel appearing on behalf of Swaraj Abhiyan whether the petitioner is a political party. We were informed that it is an unregistered non-government organization and is not a political party. We put this question to learned counsel for two reasons: firstly, we were of the *prima facie* opinion that the reliefs sought in the writ petition arising out of drought-like conditions and a declaration of drought in some parts of the country was not a political issue but a matter of grave humanitarian distress and invited concern for the affected persons and animals, particularly livestock. Secondly, we have some *prima facie* reservations whether a public interest litigation initiated by a political

party should at all be entertained. Since we were given an assurance that Swaraj Abhiyan is not a political party and humanitarian concern was uppermost, we proceeded to hear the petition on merits.

6. The writ petition was filed in the backdrop of a declaration of drought in some districts or parts thereof in nine States that is Uttar Pradesh, Madhya Pradesh, Karnataka, Andhra Pradesh, Telangana, Maharashtra, Odisha, Jharkhand and Chhattisgarh. Drought or "semi-scarcity" has since been declared very recently in April 2016 in 526 villages followed by another 468 villages in Gujarat as well. All these States are respondents in this writ petition along with the Union of India. According to Swaraj Abhiyan drought ought to be declared in most parts of the respondent States of Bihar, Gujarat and Haryana. It has, therefore, sought a direction to these three States to declare a drought and provide essential relief and compensation to people affected by the drought. The prayer for a declaration of drought in Gujarat has seemingly become infructuous, but we do have a lot to say about the response (or lack of it) by the State Government in Gujarat.

7. The petitioner has also prayed that all the respondents before us (13 in number including the Union of India) be directed to provide to the farmers affected by drought adequate and timely compensation for crop loss and input subsidy for the next crop. A prayer has also been made for a direction to the respondents to make available timely payment for

employment (more particularly to the drought affected people) under the Mahatma Gandhi National Rural Employment Generation Scheme framed under the Mahatma Gandhi National Rural Employment Guarantee Act, 2005 (for short "the NREGA Act"). It has also prayed that food grains be made available as specified under the National Food Security Act, 2013 (for short "the NFS Act") to the rural populace in the drought affected areas irrespective of their classification of being above the poverty line or below the poverty line.

8. Similarly, it is prayed that milk or eggs be made available to all children who are covered by the Mid Day Meal Scheme or the Integrated Child Development Scheme in the drought affected areas. With particular reference to the farmers, it is prayed that crop loans for damaged crops and other debts of farmers in the drought affected areas be restructured and a fair, objective and transparent package for crop loss compensation be fixed. With regard to livestock in drought affected areas it is prayed that a direction be given to provide subsidized cattle fodder.

9. During the pendency of the writ petition, several affidavits were filed by the Union of India and by the respondent States. The record being somewhat unwieldy learned counsel for the petitioner Mr. Prashant Bhushan submitted a 'Written Revised Note' for our convenience. The Note is based on the information culled out from the various affidavits on record. This has been supplemented by a detailed document styled as a

'Final Rejoinder' which is really an aggregation of the submissions made on behalf of the petitioner.

10. The Union of India has filed a counter affidavit on or about 15th January, 2016, an additional affidavit on or about 10th February, 2016 (the first affidavit), another additional affidavit on or about 19th March, 2016 (the second affidavit), yet another additional affidavit on or about 28th March, 2016 (the third affidavit which is in response to the Note) and an affidavit filed on or about 11th April, 2016 (the fourth affidavit). The learned Additional Solicitor General also handed over (on our asking) some additional but relevant documents.

11. The Note, the Final Rejoinder, the third affidavit filed by the Union of India and the list of documents are the principal documents referred to and relied upon during oral submissions by the learned Additional Solicitor General. With regard to the declaration of a drought, affidavits were also filed by the three States that we are primarily concerned with - Bihar, Gujarat and Haryana. Learned counsel for these States also handed over some documents during the course of their submissions. The sum and substance of their affidavits and the documents are generically dealt with in the affidavits filed by the Union of India.

12. On the commencement of hearing, we made it very clear to learned counsel that we are treating the writ petition as one filed in public interest. Consequently, and even otherwise, given the backdrop in which

the petition is filed, we informed learned counsel that the petition ought not to be taken as an adversarial contest. Our concern is for the drought affected persons and animals and indeed we were told by all the learned counsel that that is also their concern. We are mentioning this because over the years, public interest litigation appears to be degenerating into a no-holds barred adversarial litigation – which it is not meant to be.

13. Public interest litigation is necessary in certain circumstances particularly in a welfare State such as ours. In ***Gaurav Kumar Bansal v. Union of India***[1] it was held that the Directive Principles enjoin the State to take all protective measures to which a social welfare State is committed. It is said in paragraph 8 of the Report:

> "There is no manner of doubt that a welfare State is the protector of life and liberty of its citizens not only within the country but also outside the country in certain situations. The concept of *parens patriae* recognises the State as protector of its citizens as parent particularly when citizens are not in a position to protect themselves. The Preamble to the Constitution, read with directive principles, under Articles 38, 39 and 39-A enjoins the State to take all protective measures to which a social welfare State is committed. Interestingly, this doctrine has been recognised in India even before the Constitution came into force."

14. There are occasions when people in disadvantaged situations are unable to have access to courts and therefore access to justice and need someone to speak up for them. How else can a welfare State function effectively if it cannot even hear let alone listen to what the underprivileged and needy people have to say? In ***Sheela Barse v. Union***

[1] (2015) 2 SCC 130

of India[2] this Court held that public interest litigation is intended to prevent the violation of rights of those segments of society that cannot assert their rights owing to poverty, ignorance or other disadvantages. It was said in paragraph 11 of the Report:

> "The compulsion for the judicial innovation of the technique of a public interest action is the constitutional promise of a social and economic transformation to usher in an egalitarian social order and a welfare State. Effective solutions to the problems peculiar to this transformation are not available in the traditional judicial system. The proceedings in a public interest litigation are, therefore, intended to vindicate and effectuate the public interest by prevention of violation of the rights, constitutional or statutory, of sizeable segments of the society, which owing to poverty, ignorance, social and economic disadvantages cannot themselves assert — and quite often not even aware of — those rights."

15. Public interest litigation presents the Court with an issue based problem concerning society and solutions need to be found to that problem within the legal framework. Sometimes, the cause of the problem is bureaucratic inactivity and apathy; sometimes executive excesses that cause the problem and sometimes the problem is caused by the ostrich-like reaction of the executive. These situations represent the broad contours of public interest issues brought to the notice of the Court, and these are the kind of issues for which we need to search for solutions. The successful pursuit of appropriate solutions and consequent conclusions and directions are often pejoratively and unfortunately described as judicial activism. In this context, it is worth quoting Justice

[2] (1988) 4 SCC 226

Michael Kirby a former judge of the High Court of Australia who says in his Hamlyn Lecture "Judicial Activism – Authority, Principle and Policy in the Judicial Method"[3] with reference to our country as follows:

> "The acute needs of the developing countries of the Commonwealth have sometimes produced an approach to constitutional interpretation that is unashamedly described as "activist", including by judges themselves. Thus in India, at least in most legal circles, the phrase "judicial activism" is not viewed as one of condemnation. So urgent and numerous are the needs of that society that anything else would be regarded by many— including many judges and lawyers—as an abdication of the final court's essential constitutional role.
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> One instance may be cited from Indian experience: the expansion of the traditional notion of standing to sue in public interest litigation. The Indian Supreme Court has upheld the right of prisoners, the poor and other vulnerable groups to enlist its constitutional jurisdiction by simply sending a letter to the Court. This might not seem appropriate in a developed country. Yet it appears perfectly adapted to the nation to which the Indian Constitution speaks. Lord Chief Justice Woolf recently confessed to having been astounded at first by the proactive approach of the Indian Supreme Court in this and other respects. However, he went on:
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> > ".. . I soon realised that if that Court was to perform its essential role in Indian society, it had no option but to adopt the course it did and I congratulate it for the courage it has shown".

Much later, Justice Kirby goes on to say:

> "It is beyond contest that some of the accretions of power to the judiciary over the last century have come about as a result of failures and inadequacies in lawmaking by the other branches and departments of government. Constitutional power hates a vacuum. Where it exists, in the form of silence, confusion or uncertainty about the law, it is natural that those affected, despairing of solutions from the other law-making organs of government, will sometimes approach the judicial branch for what is in effect a new rule. They will seek a new law that responds quickly to their particular problem. When this happens judges, if they have jurisdiction in the case, are not normally at liberty to just send the parties away. How do they decide whether the fulfilment of their judicial role permits, or requires, the giving of an answer or obliges them to decline and force the parties to return to the politicians or bureaucrats? To what extent must judges defer to Parliament, when they know full well, from many like cases, that nothing will be done because the problem

[3] The Hamlyn Lectures, Fifty-fifth Series, 2003

> is too particular, divisive, technical or boring to merit political attention and parliamentary time? What, in other words, is the judicial role in the particular case?"

To be sure, judicial activism is not an uncomplimentary or uncharitable epithet to describe the end result of public interest litigation. Those who benefit from judicial activism shower praise and those who are at the receiving end criticize it. *C'est la vie*!

16. Keeping this and the common Indian in mind, we have proceeded to hear and decide this petition and we acknowledge that learned counsel made their submissions in the spirit expected of them on such a vital issue as risk management, drought assessment and drought management.

The Disaster Management Act, 2005

17. The Disaster Management Act, 2005 (hereinafter referred to as "the DM Act") has been on the statute book for more than a decade since it received the assent of the President on 23rd December, 2005. The Statement of Objects and Reasons for enacting the DM Act is, *inter alia*, as follows:-

> "The Government have decided to enact a law on disaster management to provide for requisite institutional mechanisms for drawing up and monitoring the implementation of the disaster management plans, ensuring measures by various wings of Government for prevention and mitigating effects of disasters and for undertaking a holistic, coordinated and prompt response to any disaster situation."

18. It is quite clear from the above that the object of the DM Act is not only to draw up, monitor and implement disaster management plans but also prevent and mitigate the effects of a disaster.

19. Section 2(d) of the DM Act defines "disaster" as meaning a catastrophe, mishap, calamity or grave occurrence in any area arising from natural or man-made causes which results, *inter alia,* in human suffering. A drought would certainly fall within this definition of disaster.

20. Section 2(e) of the DM Act defines "disaster management" as meaning a continuous and integrated process of planning, organizing, coordinating and implementing measures necessary or expedient for prevention of danger or threat of any disaster and mitigation or reduction of risk of any disaster or its severity or consequences.

21. Section 2(i) of the DM Act defines "mitigation" as meaning measures aimed at reducing the risk, impact or effect of a disaster or threatening disaster situation.

22. By virtue of Section 3 of the DM Act, a National Disaster Management Authority (for short "the NDMA") is required to be constituted and we are told that it has been constituted with the Prime Minister as the Chairperson *ex-officio*.

23. Section 6 of the DM Act provides for the powers and functions of the NDMA and these include laying down policies on disaster management, approving the National Plan prepared under Section 11 of the DM Act and to take such other measures for prevention of a disaster or the mitigation or preparedness for dealing with a threatening disaster situation.

24. Section 8 of the DM Act provides for the constitution of a National Executive Committee (for short "the NEC"). In terms of Section 10 of the DM Act, the NEC is required to assist the NDMA in the discharge of its functions and has the responsibility of implementing the policies and plans of the NDMA and to ensure compliance of directions issued by the Government of India for the purpose of disaster management in the country. It is also provided that the NEC shall prepare a National Plan under Section 11 of the DM Act to be approved by the NDMA. The NEC shall monitor the implementation of the National Plan. It shall also monitor, coordinate and give directions regarding the mitigation and preparedness measures to be taken by the Government of India and to lay down guidelines for and give directions to the State Government and State Authorities regarding measures to be taken by them in response to any threatening disaster situation or disaster.

25. Section 11 of the DM Act provides for the drawing up of a disaster management plan for the whole country to be called the National Plan. The National Plan is required to be prepared by the NEC and is expected to include measures to be taken for the prevention of disasters or the mitigation of their effects, measures to be taken for preparedness and capacity building to effectively respond to any threatening disaster situation or disaster.

26. The National Plan prepared by the NEC is required to be

approved by the NDMA and shall be reviewed and updated annually. We are told by the learned Additional Solicitor General that a National Plan has not yet been prepared, though a policy document has been prepared by the NEC.

27. Corresponding obligations have been placed on the State Governments under the provisions of the DM Act not only with regard to the State but also with regard to each District in the State.

28. Section 36 of the DM Act places a responsibility on every Ministry or Department of the Government of India to take measures necessary for the prevention of disasters, mitigation, preparedness and capacity building in accordance with the guidelines laid down by the NDMA.

29. Section 44 of the DM Act provides for the constitution of a National Disaster Response Force for the purposes of a specialist response to a threatening disaster situation or disaster. We have been informed that no such specialist Force has been constituted as yet.

30. Section 46 of the DM Act provides for the establishment of a National Disaster Response Fund (for short "the NDRF") for meeting any threatening disaster situation or disaster. The NDRF shall be credited with an amount by the Government of India after due appropriation made by Parliament as provided by law. This Fund shall be made available to the NEC for meeting the expenses for an emergency response, relief and

rehabilitation. We have been informed by the learned Additional Solicitor General that the NDRF has been established and the funds of the NDRF are drawn from the National Calamity Contingency Duty imposed on specified goods under the Central Excise Act and the Customs Act. In addition to this, the Government of India also releases funds for the NDRF.

31. Section 47 of the DM Act provides for the constitution of a National Disaster Mitigation Fund for projects exclusively for the purposes of mitigation which, as mentioned earlier, means measures aimed at reducing, *inter alia,* the risk of a disaster or threatening disaster situation. Although, the DM Act has been in force for more than 10 years, the National Disaster Mitigation Fund has not yet been constituted. There is, therefore, no provision for the mitigation of a disaster.

32. Section 48 of the DM Act places a corresponding obligation on the State Governments to create response and mitigation funds at the State level and the District level. We are informed that the States have set up State Disaster Response Funds but it is not clear whether District Disaster Response Funds have been established. Since the Government of India has not established the National Disaster Mitigation Fund, it is unlikely that the State Governments or the District Administration would have set up such Mitigation Funds.

33. The above review of the DM Act makes it abundantly clear that

the statute provides for risk assessment and risk management in the event of a disaster such as a drought and also crisis management in the event of a drought.

34. There is no dispute and indeed there cannot be any dispute that a drought is a disaster and risk assessment and risk management as well as crisis management of a drought falls completely within the purview of the Disaster Management Act, 2005.

35. We are quite surprised at being informed by the learned Additional Solicitor General that a National Plan has not yet been drawn up under Section 11 of the DM Act for disaster management. Evidently, anticipating a disaster such as a drought is not yet in the 'things to do' list of the Union of India and *ad hoc* measures and knee jerk reactions are the order of the day and will continue to be so until the provisions of the Disaster Management Act are faithfully implemented.

36. We are also quite surprised that the National Disaster Mitigation Fund has not yet been set up even after 10 years of the enforcement of the DM Act. Risk assessment and risk management also appear to have little or no priority as far as the Union of India and the State Governments are concerned.

37. Having expressed our anguish that the Disaster Management Act, 2005 has not been faithfully implemented as yet, we must add that it is not that nothing has been done.

38. Insofar as a drought is concerned, the Union of India has published two important documents. The first important document is the Manual for Drought Management (for short "the Manual") prepared in November 2009 by the Department of Agriculture and Cooperation, Ministry of Agriculture in the Government of India. The second important document is the National Disaster Management Guidelines for Management of Drought (for short "the Guidelines") prepared in September 2010 by the National Disaster Management Authority of the Government of India. According to the Union of India, these documents have no binding force and are mere guidelines to be followed, if so advised. This has resulted in a great deal of observance in the breach of the Manual and the Guidelines.

What is a drought?

39. The Manual is undoubtedly comprehensive, well-researched and instructive. However, before we refer to it, we must point out that it is now of more than six years vintage. It might perhaps need a revision considering the experience gained over the years and the availability of more and better information including more accurate information now available from the use of technology, satellite imagery, weather stations etc. Some suggestions have also emerged during the hearing of the writ petition and these too would require consideration in updating the Manual. There certainly cannot be any harm in being up to date,

particularly in matters concerning a drought or a drought like situation.

40. The Manual expresses difficulty in providing a precise and universally accepted definition of drought in view of a large number of factors involved. It is generally said that conditions of drought appear when rainfall is deficient in relation to the statistical multi-year average for a region over an extended period of a season or even more. The impact of a drought could be economic, environmental and social. The Manual classifies drought in three categories in terms of impact namely meteorological drought, hydrological drought and agricultural drought. These are explained as under:

> "**Meteorological drought** is defined as the deficiency of precipitation from expected or normal levels over an extended period of time. Meteorological drought usually precedes other kinds of drought and is said to occur when the seasonal rainfall received over an area is less than 25 % of its long-term average value. It is further classified as *moderate drought* if the rainfall deficit is 26-50% and *severe drought* when the deficit exceeds 50% of the normal.
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> **Hydrological drought** is best defined as deficiencies in surface and sub-surface water supplies leading to a lack of water for normal and specific needs. Such conditions arise, even in times of average (or above average) precipitation when increased usage of water diminishes the reserves.
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> **Agricultural drought** is usually triggered by meteorological and hydrological droughts and occurs when soil moisture and rainfall are inadequate during the crop growing season causing extreme crop stress and wilting. Plant water demand depends on prevailing weather conditions, biological characteristics of the specific plant, its stage of growth and the physical and biological properties of the soil. Agricultural drought arises from variable susceptibility of crops during different stages of crop development, from emergence to maturity. In India, it is defined as a period of four consecutive weeks (of severe meteorological drought) with a rainfall deficiency of more than 50 % of the long-term average or with a weekly rainfall of 5 cm or less from mid-May to mid-October (the kharif season) when 80% of India's total crop is planted

or six such consecutive weeks during the rest of the year.

The classification of drought as mentioned above need not be the only criteria used for declaring drought."[4]

41. In this context, the Manual promotes a new system of drought management (different from the colonial model) broadly based on the following salient features:

1. Abandon the use of famine codes and varied State management plans.
2. Focus on mitigation measures.
3. Adopt newer technologies.
4. Adapt to the new legal framework.
5. Include employment and area development programmes in drought mitigation.
6. Prescribe standardized steps for management at the national/central level.[5]

Strangely, none of these prescriptions seem to have gained universal acceptance over the years.

Monitoring of Drought by State Governments

42. According to the Manual, drought is monitored by the State Governments by obtaining information on four key indicators.[6] They are: rainfall; storage water levels in reservoirs; surface water and ground water level; sowing and crop conditions. The Manual explains these key indicators in the manner given below. However, it must specifically be pointed out that the Manual categorically states that "**Rainfall is the most important indicator of drought. A departure in rainfall from its long-term averages should be taken as the basis for drought declaration.**

[4] Page 13 and 14 of the Manual for Drought Management
[5] Pages 4 to 6 of the Manual
[6] Section 2 of the Manual

The IMD [Indian Meteorological Department] can provide rainfall data to the State Government, which can also collect data through its own network of weather stations."[7]

Rainfall: The Indian Meteorological Department (IMD) and State Governments collect data on rainfall every day during the rainy season. According to the IMD, drought sets in when the deficiency of rainfall at a meteorological sub-division level is 25 per cent or more of the Long-Term Average of that sub-division for a given period. The drought is considered "moderate", if the deficiency is between 26 and 50 per cent, and "severe" if it is more than 50 per cent.[8]

Storage Water Levels in Reservoirs: State Governments collect data on the levels of stored water in important reservoirs through its Irrigation Department. Reservoir storage level is a useful indicator of water shortages. As data on reservoir storage are available on a regular basis, these could provide accurate information on water shortages. The Central Water Commission maintains data on water levels in 81 important reservoirs of the country, where the water storage is compared with the Full Reservoir Level.[9]

Surface Water and Groundwater Level: Natural discharge from shallow aquifers provides base flow to streams and sustains the water in lakes and ponds, particularly during periods of dry weather. Similarly,

[7] Page 49 of the Manual. Emphasis has been supplied by us.
[8] Page 38 of the Manual
[9] Page 38 of the Manual

groundwater levels are also affected due to poor recharge, whether due to lack of adequate rainfall or poor water conservation practices. As a result, water availability in deep bore-wells and open wells diminishes substantially. Declining groundwater level are important indicators of drought conditions, though these are often attributed to over extraction of water.[10]

Sowing and Crop Conditions: An important indicator of drought provides information on sowing on a weekly basis. A delayed sowing shows rainfall deficiency and indicates the onset of drought. Reports on crop conditions also provide an indication of the severity of the drought situation. If the crops are wilting, it indicates soil moisture stress. A crop contingency plan and other mitigation measures are implemented based on reports prepared for all the crops sown during the monsoon.[11]

Monitoring of Drought by Scientists

43. Scientists utilize other indices to measure the intensity, duration and spatial extent of drought.[12] These are: Aridity Anomaly Index; Standardized Precipitation Index; Palmer Drought Severity Index; Crop Moisture Index; Surface Water Supply Index; Normalized Difference Vegetation Index; Normalized Difference Wetness Index, Effective Drought Index and Moisture Adequacy Index. It is not necessary to deal with each of these indices particularly since the Manual makes is quite

[10] Page 38 and 39 of the Manual
[11] Page 39 of the Manual
[12] Section 2 of the Manual

clear that there ought to be a convergence of views between the State Governments and scientists in the declaration of a drought. It is, therefore, stated:

> "It is clear that that no one indicator or index is adequate for monitoring drought at the State level; instead, a combination of indicators and indices needs to be used for drought declaration.
>
> On the basis of wide-ranging consultations with the meteorologists and agriculture scientists, ***rainfall deficiency, the extent of area sown, normalized difference vegetation index and moisture adequacy index are recommended as the four standard monitoring tools which could be applied in combination for drought declaration. Since the information on these indicators and indices are available at the level of Taluka /Tehsil / Block, drought may be declared by the State Government at the level of these administrative units on the basis of observed deficiencies.*** At least three indicators or index values could be considered for drought declaration.
>
> It is recommended that these new standards / guidelines should replace the present system of drought declaration that is based on rainfall deficiency and reduction in annewari / paisewari / girdawari figures."[13]

44. From a reading of the Manual, it is clear that drought declaration today is to be viewed quite differently from the past practice. The emphasis now is on four factors: (i) Rainfall deficiency; (ii) Extent of area sown; (iii) Normalized Difference Vegetation Index, and (iv) Moisture Adequacy Index. This is generally accepted by almost all the States and the Union of India as well.

Rainfall deficiency

45. How is rainfall deficiency calculated? It must be remembered that rainfall is the most important indicator of drought. The State Government can obtain rainfall data from the IMD and also collect data through its

[13] Pages 47 and 48 of the Manual

own network of weather stations. This rainfall data may be applied in two ways:

1. The State Government could consider declaring a drought if the total rainfall received during the months of June and July is less than 50% of the average rainfall for these two months and there is an adverse impact on vegetation and soil moisture, as measured by the vegetation index and soil moisture index. Such a rainfall deficit would cause so much damage to agriculture that it would be difficult to revive crops.

2. The State Government could consider declaring a drought if the total rainfall for the entire duration of the rainy season of the state, from June to September (the south-west monsoon) and or from December to March (north-east monsoon), is less than 75% of the average rainfall for the season and there is an adverse impact on vegetation and soil moisture, as measured by the vegetation index and soil moisture index.[14]

Extent of area sown

46. Sowing is an important indicator of the spread and severity of drought. The area under sowing provides reliable information on the availability of water for agricultural operations. Drought conditions could be said to exist if the total sowing area of Kharif crops is less than 50% of the total cultivable area by the end of July/August, depending upon the schedule of sowing in individual States. In such situations, even if rainfall revives in the subsequent months, reduction in the area under sowing

[14] Page 49 of the Manual

cannot be compensated for and the agricultural production would be substantially reduced. The State Government should therefore consider declaring a drought if along with the other indicators, the total area sown by the end of July/August is less than 50% of the total cultivable area.

47. In case of Rabi crops, the declaration of drought could be linked to the area of sowing being less than 50% of the total cultivable area by the end of November /December along with the other indicators.[15]

Normalized Difference Vegetation Index (NDVI)

48. According to the Manual, there are at present 11 (eleven) agriculturally important and drought-vulnerable States. They are: Andhra Pradesh (now including Telangana), Bihar, Gujarat, Haryana, Karnataka, Maharashtra, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu and Uttar Pradesh.[16] We are primarily concerned with the drought-vulnerable States of Bihar, Gujarat and Haryana.

49. NDVI is an index indicating the density of vegetation on earth based on the reflection of visible and near infrared lights detected by the National Oceanic and Atmospheric Administration – Advanced Very High Resolution Radiometer instrument from a remote sensing satellite. The values obtained for a given NDVI always range from –1 to +1. A negative number or a number close to zero means no vegetation and a number close to +1 (0.8-0.7) represents luxurious vegetation. For declaring

[15] Page 50 of the Manual
[16] Page 51 of the Manual

drought, States need to obtain NDVI values through the National Agricultural Drought Assessment and Monitoring System. All the above-mentioned States receive National Agricultural Drought Assessment and Monitoring System reports on a regular basis. Those States which do not receive the report can approach the National Remote Sensing Centre for receiving the information. It is necessary that the States declare drought only when the deviation of NDVI value from the normal is 0.4 or less. However, the NDVI value needs to be applied in conjunction with other indicators and values. The NDVI must not be invoked for the declaration of drought in isolation from the other two key indicators.[17]

Moisture Adequacy Index (MAI)

50. MAI is based on a calculation of weekly water balance and is a ratio expressed as a percentage. If the percentage is between 76 and 100 there is no drought; between 51 and 75 there is mild drought; between 26 and 50 there is a moderate drought and below 25 there is a severe drought.

51. MAI values are critical to ascertain agricultural drought. The State agriculture department needs to calculate the MAI values on the basis of data available to it and provide it to the Department of Relief and Disaster Management, which would ascertain that MAI values conform to the intensity of moderate drought before drought is declared. MAI values

[17] Page 51 and 52 of the Manual

need to be applied in conjunction with other indicators such as rainfall figures, area under sowing and NDVI values.[18]

National Disaster Management Guidelines

52. The second important publication handed over to us is in a sense a follow-up to the Manual, namely, the National Disaster Management Guidelines of September, 2010[19] published by the NDMA (with the Prime Minister as its Chairperson) constituted under the Disaster Management Act, 2005. The Guidelines provide a large number of meaningful suggestions and practices on virtually all aspects of drought management. However, what is important for our present purposes is that in the 'Status and Context' of drought in India, it is stated, *inter alia*, that drought has a slow onset and has an impact on economic, environmental and social sectors. While its impact can be reduced through mitigation and preparedness, it is important to develop contextual plans to deal with the impacts. It is stated as follows:

> "Drought is a natural hazard that differs from other hazards as it has a slow onset, evolves over months or even years and affects small pockets to a large regional expanse. Its onset and severity are often difficult to determine. As a result, there is a lack of urgency in response. Like other hazards, the impacts of drought span economic, environmental and social sectors and can be reduced through mitigation and preparedness. Because droughts are a normal part of climate variability for virtually all regions, characterized by extended periods of water shortage, it is important to develop contextual plans to deal with them in a timely, systematic manner as they evolve."[20]

[18] Page 53 and 54 of the Manual
[19] National Disaster Management Guidelines: Management of Drought. A publication of the National Disaster Management Authority, Government of India. ISBN 978-93-80440-08-8, September 2010, New Delhi.
[20] Page xvii of the Guidelines

53. A little later, a three-pronged strategy is advocated, namely, of prevention, preparedness and mitigation rather than the erstwhile relief-centric approach of the past. It is stated:

> "The value of prevention, preparedness and mitigation is now gaining recognition the world over. In India in particularly, after 2005, there has been a paradigm shift from the erstwhile relief-centric response to a proactive prevention, mitigation and preparedness-driven approach for conserving developmental gains and also to minimize loss of life, livelihood and property."[21]

54. With regard to the 'changing face' of drought in India, the Guidelines give the telling (and shocking) examples of Cherrapunji in Meghalaya and Jaisalmer in Rajasthan and it is observed:

> "The traditional approach to drought as a phenomenon of arid and semi-arid areas is changing in India too. Now, even regions with high rainfall, often face severe water scarcities. Cherrapunji in Meghalaya, one of the world's highest rainfall areas, with over 11, 000 mm of rainfall, now faces drought for almost nine months of the year. On the other hand, the western part of Jaisalmer district of Rajasthan, one of the driest parts of the country, is recording around 9 cm of rainfall in a year."[22]

55. This preliminary discussion is intended to indicate that a declaration of drought is not a complicated affair but a manageable exercise and an appropriate conclusion can be scientifically drawn with the available data. Nevertheless, it is not a judicially manageable exercise and no judicially acceptable standards can be laid down for declaring or not declaring a drought. With this background and on the basis of the information provided to us, it is necessary to see whether a possible

[21] Page 1 of the Guidelines
[22] Page 2 of the Guidelines

drought situation or a drought-like condition exists in Bihar and Haryana. It may be recalled that Gujarat has declared a drought (or semi-scarcity as Gujarat would like to call it) in 526 villages in three districts followed by another 468 villages in five districts (including the earlier three districts) during the pendency of this writ petition. Perhaps more areas in Gujarat might need to be declared as drought hit.

56. Notwithstanding the absence of judicially manageable standards, the judiciary cannot give a totally hands-off response merely because such standards cannot be laid down for the declaration of a drought. However, the judiciary can and must, in view of Article 21 of the Constitution, consider issuing appropriate directions should a State Government or the Union of India fail to respond to a developing crisis or a crisis in the making. But there is a *Lakshman rekha* that must be drawn.

Declaration of drought in Bihar

57. The State of Bihar has filed two affidavits before us - one on or about 14th January, 2016 and the other on or about 11th April, 2016. The latter affidavit effectively relies on the affidavits filed by the Union of India since "the State of Bihar has furnished all the requisite information and data to the Central Government regarding the issue of drought declaration in the State. The Union of India has filed its comprehensive affidavit, which contains the response of the State of Bihar."

58. The reference to the affidavits filed by the Union of India arises due to our direction given on 18th January, 2016. We had directed the Secretary in the Department of Agriculture, Cooperation and Farmers Welfare in the Union of India to convene a meeting of his counterparts in the States to consider an effective response to the drought and a possible drought situation in the country. Pursuant thereto, a meeting was convened by the concerned Secretary on 25th January, 2016 with officers of the Government of India and on 27th January, 2016 with officers of the State Governments.

59. The response of Bihar in sum and substance, as regards the four admitted key indicators, is that rainfall deficiency in the end of July 2015 was 30% and the deficiency had decreased to 20% by the end of August 2015 thereby implying that there is no rainfall deficit in Bihar (as against the requirement of 50% deficit). Sowing of paddy crop was at 96.03% and of maize at 89.62% at the end of August 2015 (as against the requirement of 50%). Steps are taken to provide irrigation facilities through tube-wells and canals to save the standing crops and a large amount is distributed as diesel subsidy for the Kharif crop. In view of this, the situation does not warrant a declaration of a drought.

60. Even a cursory evaluation of the information points to the fact that (i) Bihar failed to take into consideration that a drought is not necessarily a State-wide phenomenon and a declaration of drought might be limited

to a few areas. A drought might exist in a district or a sub-division of a district such as a taluka, tehsil or block but not the entire State. (ii) Bihar also failed to consider that the monitoring or the possibility of a drought does not end in July or early August but continues till the end of September and in some situations till the end of November. The Guidelines provide that "To promote management of relief measures in near real time it is necessary to declare early season drought by end of July, mid season drought (growing season) by end of September and end season by November."[23] (iii) Before us, Bihar has completely ignored the remaining two factors while taking a decision not to declare a drought, namely, NDVI and MAI. The reason for the non-consideration of these material indicators is not clear.

61. What is more saddening is that the rainfall coverage report has been selectively adverted to for no apparent reason. While the State-wide rainfall deficit for June and July 2015 might have been 30%, the rainfall in June and July 2015 in ten districts, that is, Araria, East Champaran, Madhepura, Madhubani, Muzazffarpur, Purnia, Saharsa, Seohar, Sitamarhi and Siwan was less than 50% the average rainfall. The coverage report clearly indicates that as on 30th September, 2015 rainfall is deficit in 19 out of 38 districts in Bihar that is in half of the districts in Bihar the rainfall is below 75% of the average. The affected districts are Araria, Bhojpur, Gaya, Gopalganj, Madhepura, Madhubani, Muzaffarpur,

[23] Page 27 of the Guidelines

Nalanda, Nawada, Patna, Purnia, Saharsa, Saran, Sheohar, Sitamarhi, Siwan, Supaul, Vaishali and West Champaran. The overall State-wide deficit is 27% and this gets progressively worse. As on 30th October, 2015 three more districts that is Darbhanga, Jamui and Katihar have rainfall below 75% of the average, the overall State-wide deficit being 31%.

62. Since Bihar has selectively disclosed information and closeted full and complete information from us, we do not know the extent to which each taluka, tehsil or block is affected in each of the 22 out of 38 districts in Bihar. The Manual states (and the Manual is relied on by Bihar) that "**Rainfall is the most important indicator of drought. A departure in rainfall from its long-term averages should be taken as the basis for drought declaration."** How did this very crucial factor escape the attention of the powers that be in Bihar?

63. As far as the area under cultivation is concerned, it is true that the extent of area sown continues to exceed 50% of the total cultivable area. Bihar must be credited for this, but that is not the only or the most important factor to take into consideration for declaring or not declaring a drought. Unfortunately, Bihar seems to be giving undue importance to this one key indicator at the expense of the remaining three key indicators.

64. The third and fourth key indicators are NDVI and MAI. In this regard, our attention was invited to a few pages of a monthly Report of

Agricultural Drought Assessment for Bihar for the month of August, 2015. The Report is prepared by the Mahalanobis National Crop Forecast Centre under the Ministry of Agriculture and Farmers Welfare. Reference was made to the NDVI and the Normalized Difference Water Index (NDWI).[24] The Report indicates that till August 2015 the vegetation condition is good in the entire State except in a few districts that is between 0.61 and 0.52 (which is better than in the previous three years). Similarly, the NDWI condition till August 2015 is good in the entire State except in a few western and southern districts that is between 0.50 and 0.40 (which is slightly poorer than in the previous three years). However, the "Vegetation Condition Index (NDVI) shows fair or good vegetation condition in most part of Bihar, while Vegetation Condition Index (NDWI) shows poor to slightly poor moisture condition in large part of the state, particularly northern region." The summary points out that in August 2015 rainfall has been normal to deficient except in Banka District; vegetation condition is good in Eastern and Western Bihar while Northern and Southern Bihar have poor vegetation condition; the moisture condition is good except in a few districts of Northern Bihar, and 31 districts are categorized as normal while 7 districts are under 'watch' category.

65. As mentioned above, Bihar has made available the figures only till August 2015 but as we have seen earlier, the general situation in Bihar

[24] Higher values of NDWI signify more surface wetness.

gets progressively worse after August 2015. The figures (other than rainfall coverage) post August 2015 have not been shared with us by learned counsel for Bihar for unknown reasons. Perhaps the game plan is to disclose selective information and material that suits its interests (but not the interest of its citizens) and to withhold information and material that might be uncomfortable. We therefore cannot make any comment on the third key indicator that is NDVI.

66. However, as far as MAI is concerned, the petitioner has annexed to the Final Rejoinder the MAI for Bihar.[25] A perusal of this clearly shows that large swathes of Bihar are facing a moderate or mild drought as on 30th September, 2015.

67. In its defence, Bihar states that a Crisis Management Group headed by the Chief Secretary has been constituted. Several steps have been taken for arrangement of water for irrigation and distribution of diesel subsidy for Kharif and Rabi crops. Bihar has canvassed a case of no water shortage. It is pointed out that Bihar has 12 river basins and most of them are perennial Himalayan rivers. In view of the deficient rainfall, the Department of Water Resources has made arrangements for irrigation through canals, ponds and the Minor Irrigation Department has made arrangements through public bore-wells. On an in-depth analysis, it is concluded by Bihar that the situation does not warrant the declaration of drought.

[25] Source: http://bhuvan.nrsc.gov.in

68. On the basis of what has been told to us and the material referred to by learned counsel for Bihar, two definite conclusions can be arrived at: firstly, the information provided does not reflect the position on the ground in districts or tehsils or blocks or talukas but is intended to reflect the position in the entire State of Bihar. There is no reason why relevant information at the micro level should be ignored. We have already mentioned that drought conditions may exist in a taluka, tehsil or block but not necessarily in the entire district or State and that is why micro level information should be considered. Secondly, it is quite clear that: (i) there is deficit rainfall (the deficit being more than 25%) for the period June to September 2015 in 19 out of 38 districts in Bihar and this gets progressively worse. If the coverage for the entire State is taken into consideration then the deficit is to the extent of 27% and by 30th October, 2015 the deficit goes up to 31%; (ii) the area under sowing is considerable during June and July, 2015 but the status of the Kharif crop thereafter, whether it is wilting due to deficit rain or low moisture or there is an adequate network of canals, ponds and bore-wells is not disclosed; (iii) the NDVI in August 2015 is generally good except in parts of Bihar. The situation in the end of September 2015 and thereafter is not known; and (iv) the MAI for Bihar shows that large areas in the State are facing a moderate or mild drought as on 30th September, 2015.

69. Under the circumstances, it appears to us that there is more than sufficient material to suggest that there is a perceptible threat of a mild or moderate drought in some districts, tehsils, talukas or blocks of Bihar. The unfortunate part of the exercise undertaken by us is that Bihar is in a state of denial.

Declaration of drought in Gujarat

70. The State of Gujarat filed its first and only affidavit on 21st April, 2016 just a few days before hearing concluded although during the course of oral submissions by learned counsel for Gujarat on 7th April, 2016 some documents were handed over to us.

71. According to Gujarat, rainfall received was 61.9% of the average rainfall in the end of July 2015 and during the monsoon period of 2015-16 the State received 81.24% of the annual rainfall. Hence there is no rainfall deficit in Gujarat. Again, the figures presented to us in this manner do not reveal the entire truth.

72. Even though Gujarat relies upon State-wide figures of rainfall, it is acknowledged that "normally the pattern of rainfall varies from village to village and sometimes within the same area, certain villages receive high rainfall and certain villages receive low rainfall, therefore, district-wise averages are normally considered." There is therefore an inherent contradiction in the understanding of Gujarat in what constitutes deficit rainfall as she understands and as projected before us.

73. The rainfall data submitted by Gujarat makes for interesting reading inasmuch as in June 2015 only two districts (in Saurashtra) received more than 50% rainfall out of 33 districts. In July 2015 the number of districts receiving adequate rainfall went up substantially but there were five districts in East Central Gujarat, two districts in Saurashtra and six districts in South Gujarat that received less than 50% rainfall. If the rainfall data as on 30th September, 2015 is taken into consideration, the district of Vadodara in East Central Gujarat has consistently received less than 40% rainfall but that district has not been declared drought-hit. The entire South Central Gujarat has received less than 75% rainfall and two districts of Saurashtra have received less than 75% rainfall as also the entire South Gujarat region. As per the information made available on affidavit there is no doubt that every district in Central Gujarat and South Gujarat has received inadequate rainfall while two districts of Saurashtra are hit by inadequate rainfall.

74. Gujarat has constituted a Cabinet sub-Committee on 23rd September, 2015 to monitor the situation arising due to less than average rainfall in the State. A district level and taluka level relief committee has also been constituted for monitoring and implementation of measures to deal with drought. Why was all this necessary if Gujarat was so well positioned in terms of adequate rainfall?

75. Gujarat submits that on account of the satisfactory rainfall, the normal crop sowing was to the extent of 99.70%. As far as agriculture production is concerned, the advance estimate production for 2015-16, as per the Agriculture Department of Gujarat is estimated to be 95% of the average crop yield for major crops. This might be true. But, Gujarat considers scarcity/semi-scarcity on the basis of annewari (crop cutting procedure) as per the provisions of the Gujarat Relief Manual.

76. On completion of the annewari process, it appears that the Cabinet sub-Committee met in the end of March 2016 (it might have met earlier also) and took a decision with regard to declaring a drought. The Cabinet sub-Committee appears to have found that there is no village falling below 4 annas (out of 12 annas and not 16 annas) where mandatory scarcity is required to be declared in terms of the Gujarat Relief Manual. Notwithstanding satisfactory rainfall and normal crop sowing, in 526 villages in three districts that is Rajkot, Jamnagar and Devbhoomi Dwarka the agricultural output is between 4 annas and 6 annas.

77. Therefore, on a consideration of the available data, the Government of Gujarat declared a drought in 526 villages in three districts by a resolution dated 1st April, 2016. The Government of Gujarat uses the expression 'semi scarcity' as against drought and one of the submissions made by the petitioner in this regard is that there must be some standardization in the nomenclature otherwise each State can use a

different expression without admitting a drought.

78. Subsequently, another 468 villages have also been declared as affected by drought (or semi-scarcity - the date of the second declaration has not been indicated). Therefore, a total of 994 villages in five districts have been declared as affected by drought in Gujarat, despite its claim of adequate rainfall and normal crop sowing.

79. At this stage, it should be mentioned that Maharashtra employs the annewari system where the cut-off is 50 paise crop yield for declaring a drought or a drought-like situation. (We take it that the unit is 50 paise in a rupee of 100 paise). What is more important is that Maharashtra completed the crop-cutting exercise in October 2015 and passed a Resolution on 20th October, 2015 spelling out the various measures to be undertaken in villages where annewari is less than 50 paise. It is difficult to understand why Gujarat could make an assessment only in March 2016 and not months earlier as in Maharashtra.

80. As regards the third and fourth key indicators (NDVI and MAI) Gujarat points out that NDVI needs to be applied in conjunction with other indicators and there are large tracts of land in the State that are not arable which adversely affects NDVI. The type of soil is also a relevant consideration and despite many parts of the State being inundated with water, MAI will be low due to the type of soil. This information is used by Gujarat for justifying the annewari system which is said to be a time-

tested method of determining scarcity or drought. Consequently, both NDVI and MAI have not been given any importance by Gujarat or in any event, greater importance is given to the traditional annewari system of assessment of crop production.

81. For this reason, we do not have the NDVI figures with us but the petitioner has filed with the Final Rejoinder the MAI chart which indicates that large tracts of Gujarat are facing a severe or moderate drought.[26]

82. In justification of not declaring a drought or a drought-like situation, Gujarat says that it has taken steps to combat the probable water crisis and the National and State Water Policy for drinking water has been given the highest priority. It is further stated that South Gujarat has perennial rivers namely Narmada and Tapi and Central Gujarat has the perennial river Mahi. Gujarat has an extensive network of pipelines and several water supply schemes based on these rivers and other rivers as also water reservoirs and bore-wells. It is because of the river/canal irrigation that there are a large number of bore-wells for irrigation and both these regions have about 94% to 95% of crop sowing. There is adequate food grain available including fodder for cattle and there is adequate availability of drinking water.

83. The affidavit and contentions of Gujarat raise an extremely important issue namely whether continued importance should be given to

[26] Source: http://bhuvan.nrsc.gov.in

the traditional method of drought assessment by following the annewari system rather than rainfall deviation. The Manual prepared by Government of India would like to discard the annewari system but Gujarat continues to hold on to it. Gujarat might be justified in doing so (although we doubt it) but perhaps some standardization on the part of the Government of India may be necessary in this regard.

84. The Manual very clearly refers to the effect and impact of a delayed declaration of drought (as in the case of Gujarat). It is stated in the Manual as follows:-

> "Drought declaration should be a timely step so that relief assistance and other concessions can be provided to the drought affected people at the right time."[27]

It is further stated as follows:

> **"Ideally, States should declare drought in October**. The monsoon is over by this month and figures for total rainfall are available in this month. Similarly, a final picture regarding the crop conditions as well as the reservoir storage is available by the end of October. It provides adequate time for the central team to visit the State and assess the crop losses."[28] (The emphasis is in the original).

The Guidelines also state:

> "Declaration of drought, traditionally, is recommended after the estimates of crop production are obtained through Annewari/Paisewari. Generally those areas where Annewari/Paisewari is less than 50 percent, the areas is considered to be affected by a drought. Final figures in respect of Kharif crops are available only in December, while those for Rabi crops are available in March.
>
> If drought is declared as late as December or January, relief works will start only after such a declaration. It will be too late if the distress signals have appeared in the wake of rainfall deficiency. Also if the drought is declared in

[27] Page 47 of the Manual
[28] Page 55 of the Manual

> January or February, the Central Team would visit much after the crop is harvested and it would not be in a position to assess crop losses. To promote management of relief measures in near real time it is necessary to declare early season drought by end of July, mid season drought (growing season) by end of September and end season by November."[29]

85. The system followed by Gujarat clearly does not meet with the approval of the Manual or the Guidelines. As noticed above, drought was declared in 526 villages in Gujarat only on 1st April, 2016 and in 468 villages thereafter. As per the Manual and the Guidelines this is clearly too late for those in distress. The purpose of an early declaration of drought is preventive, but the route taken by Gujarat is palliative and relief centric. Risk assessment and risk management gives way, in Gujarat, to crisis management. This is hardly of any advantage to those whose distress can be avoided.

Declaration of drought in Haryana

86. The State of Haryana filed an affidavit only on 21st April, 2016. According to learned counsel for Haryana deficit rainfall for June and July 2015 is minus 12.6% and for the calendar year 2015 the deficit rainfall is minus 16.4%. However, there is sufficient coverage under irrigation through tube-wells and canals in Haryana and as such a declaration of drought is not warranted.

87. However, for the period June to September 2015 there is more than 25% deficit rainfall in 11 out of 21 districts of Haryana. These districts are: Bhiwani, Palwal, Fatehabad, Hissar, Jind, Kaithal,

[29] Page 27 of the Guidelines

Mohendergarh, Panchkula, Panipat, Rohtak and Sirsa with Ambala on the borderline. As far as the entire State is concerned, the rainfall deficit is minus 28.8% for the period June to September 2015. In terms of deficit rainfall there is most certainly a drought-like situation in Haryana.

88. With regard to the extent of sowing it is stated that there is an increase in the total area sown during Kharif 2015 as against Kharif 2014. Haryana says that food grain production has been adequate and there is no district including any deficit rainfall district where the area under sowing and average production of food grain is below 50%. In fact, overall there has been an increase in food grain production by 3.2% over Kharif 2014.

89. Haryana says that a self-sufficient irrigation system is in place in the State with two important sources of canal water that is the Bhakra Canal and the Yamuna river. In addition, there are lakhs of tube-wells and wells for irrigation purposes which ensure that 83% of the State is covered under irrigation through canals, tube-wells and wells. There is no shortage of fodder or drinking water.

90. Under the circumstances it is stated that there is no drought-like situation in Haryana. The concentration of Haryana is entirely on food grain production. Undoubtedly, there does appear adequate food grain productivity as far as the Kharif crop is concerned. But there is no acknowledgement of rainfall deficit which, as per the Manual is the most

important indicator for the purposes of declaring a drought. There is also no application of mind to any of the key indicators (NDVI and MAI) mentioned in the Manual and the pity is that there appears to be a total lack of any concern for the situation on the ground.

91. The petitioner has placed before us the MAI for Haryana ending 30th September, 2015[30]. A perusal of the chart indicates that (frighteningly) most of Haryana is in the grip of a severe or moderate or mild drought. But Haryana also banks upon other factors for not declaring a drought, such as:

(i) Extent of fodder supply and its prevailing prices compared to normal prices;
(ii) Position regarding drinking water supply;
(iii) Demand for employment on public works, and unusual movement of labour in search of employment;
(iv) Current agricultural and non-agricultural wages compared with normal times;
(v) Supply of food grains, and price situation of essential commodities, could be applied by the State, in combination for drought declaration.

92. We make no comment on the view expressed by Haryana except to say that the disparity in the methodology of assessment of a drought or a drought-like condition between the Government of India and Haryana is quite stark.

Discussion and Conclusions

93. Each of the three States that we are concerned with have their own unique method of determining whether there is a drought or not. According to the learned Additional Solicitor General the Manual and the

[30] Source: http://bhuvan.nrsc.gov.in

Guidelines are indicative and not mandatory. The third affidavit of the Union of India complicates the matter by introducing the concept of 'federalism' that is the relationship between the Union and the States with respect to drought. The ostensible purpose of introducing this concept is to enable the Union of India to wash its hands off in matters concerning drought declaration and to give enough elbow room to a State Government to decide whether to declare a drought or not since the Manual is only a reference document and a guide for action and the State Governments could face situations under which they may need to deviate from the guidance given in the Manual. Under the circumstances, it is stated in the third affidavit of the Union of India that it would not be proper for the Union of India to sit in judgment over the decision of the State Governments or to frame binding guidelines. Since this is of some significance, the view expressed by the Union of India is reproduced below:

> "14. In reply to para 7 & para 17 of the revised note it is submitted that the petitioner has stated that Union of India and all the States require to follow standard definition and modalities for declaration of drought recommended by the Manual for Drought Management. In this regard, it is stated that the Manual for Drought Management is used extensively as a reference document as well as guide for action by policy makers, administrators and technical professionals. That the Government of India recommends these guidelines, it also recognizes that the State Government could face situations under which they may need to deviate from these guidelines and they may have necessary freedom to do so. The manual does not in any way reduces the state government authority to take their own decisions in a drought situation. This is necessary as there might be situations which do not find mention in the manual. Also the fact that some states are more irrigated than others, as also availability of water, and are not so dependent on rainfall vis-à-vis other states. The requirement of water is also dependent on the type of crop sown and even when there is deficit

rainfall, the crop production does not necessarily fall to that extent in all states. Accordingly, in a federal polity, it may not be justified to issue binding guidelines for all states to declare drought. It may also be pointed out that the states are as much concerned about the welfare of the people on whose mandate they have come to power and it will not be proper on the part of the Central Government to sit in judgment on their decisions or to frame guidelines which are binding on them. Further, both the central and state government have to work as a team and supplement the effort of each other so as to provide necessary relief to the people.

Hence, it will not be proper to direct the states of Bihar, Gujarat and Haryana to immediately declare drought in Taluka/Tehsil/Blocks as suggested by the petitioner. These states in any case have taken their own reasoned decision for not declaring drought in their states which have already been enumerated in the earlier affidavits filed by this department dated 10th February, 2016 and 11th March, 2016."

94. In light of this, the question that we had raised earlier remains to be answered: Where does the buck stop? The Disaster Management Act, 2005 places considerable responsibility on the Union of India in matters pertaining to disasters. This begins with the formulation of a National Plan. The Union of India is expected to make available its vast expertise and database in leading (and not merely guiding) the State Governments in the right direction. The final decision to declare a drought is of the State Government but the resources available with the Union of India can be effectively used to assist the State Governments in having a fresh look into the data and information and to arrive at the correct decision in the interest of the affected people of the State. It cannot totally wash its hands off on issues pertaining to Article 21 of the Constitution but at the same time, we do not suggest that the authority of the State Government to declare a drought or any other similar power is diluted. The Union of

India has certainly to maintain a delicate and fine balance between federalism and its constitutional responsibility, and that it must do, otherwise it is ultimately the common person who will suffer and be in distress because of a situation not of his or her making.

95. What are the figures being discussed in this case? From the documents filed by the Union of India (on our asking) 11 out of 29 States in the country (now including Gujarat) have declared a drought. In other words, a drought has been declared in 1/3rd of the country. In our opinion, a strong case has been made out for reconsidering the declaration of a drought in Bihar and Haryana and in more parts of Gujarat. It may be mentioned that as per the Manual the three States of Bihar, Gujarat and Haryana are agriculturally important but drought-vulnerable.[31]

96. Of the 10 States in which drought has been declared (other than Gujarat) as per the information furnished by the State Governments to the Union of India, the number of affected districts is 234 representing more than 1/3rd of the districts in the country; the total population in the districts affected by drought is about 33 crores which is about 1/4th of the population of the country. Swaraj Abhiyan says that the figure is between 40 crores and above 50 crores that is about at least 1/3rd of our population. We are therefore concerned with a very large number of lives and not just very large numbers and statistics. It is true that the degree of severity or intensity of the drought might impact differently in different parts of a

[31] Page 51 of the Manual

district or a smaller unit, but the fact is that drought does exist even in those areas, as per the assessment of the State Government. Can we afford to ignore the plight of such a large population?

97. The timing of the declarations by the various States is also significant. The ten respondent States that have declared a drought and completed their assessment exercise between August 2015 and December 2015. On the other hand and inexplicably Gujarat began its exercise only in March 2016. The Manual mentions that the final figures of the Kharif crop are available in December. There is therefore no reason to delay the assessment exercise till March of the following year. The adverse or negative impact of a delayed declaration of drought affects the common person, particularly women and children, and postpones the assistance that is needed. It also puts an undue strain on the resources of the State Government and the Government of India. All in all, a delayed declaration is of no assistance to anybody whatsoever and the consequences thereof are mentioned in the Manual and adverted to above.

98. We have been informed by the learned Additional Solicitor General that on its part, the Government of India does issue regular advisories to the State Governments but that they have to take the final decision in the declaration of a drought. Maybe the issuance of advisories is an adequate response to an impending crisis but maybe it is not. That is a call that the Government of India will have to take, but whatever view

is taken by the Government of India, it must appreciate that as far as a response to a disaster is concerned the approach of the Union of India should be small-minded in certain respects but financially liberal. It is true that provision for finances has been made in the National Disaster Response Fund, but whether that is adequate and releases are timely is not an issue before us. In any event, in view of the provisions of the Disaster Management Act, 2005 the buck will eventually stop with the Government of India.

99. Towards the fag end of the hearing of the case, Mr. Prashant Bhushan learned counsel for Swaraj Abhiyan presented the Agricultural Drought Assessment Report for October 2015. We are told that a similar report is usually prepared every month and distributed to all concerned. The report shown to us is prepared by the Mahalanobis National Crop Forecast Centre and the National Remote Sensing Centre, ISRO, Department of Space at Hyderabad. This report gives the agricultural drought situation for a number of districts. As far as the three States of Bihar, Gujarat and Haryana are concerned, the drought information is as follows:

STATE	Normal	Mild	Moderate
Bihar	23	15	00
Gujarat	07	16	03
Haryana	09	08	04

100. It is clear from the above chart that it was known in October 2015 that several districts in these three States are facing varying degrees of drought. Yet, no preparatory steps appear to have been taken to tackle a possible disaster. The information provided is from reputed agencies of the Government of India and there is no reason for any of the States to have ignored it. It is this ostrich-like attitude of these State Governments that compels us to make some comment about their concern.

Directions

101. Keeping all the factors in mind we issue the following directions:

1. As mandated by Section 44 of the Disaster Management Act, 2005 a National Disaster Response Force with its own regular specialist cadre is required to be constituted. Unfortunately, no such force has been constituted till date. Accordingly, we direct the Union of India to constitute a National Disaster Response Force within a period of six months from today with an appropriate and regular cadre strength.

2. As mandated by Section 47 of the Disaster Management Act, 2005 a National Disaster Mitigation Fund is required to be established. Unfortunately, no such Fund has been constituted till date. Accordingly, we direct the Union of India to establish a National

Disaster Mitigation Fund within a period of three months from today.

3. Section 11 of the Disaster Management Act, 2005 requires the formulation of a National Plan relating to risk assessment, risk management and crisis management in respect of a disaster. Such a National Plan has not been formulated over the last ten years, although a policy document has been prepared. We can appreciate that the formulation of a National Plan will take some time but surely ten years is far too long for such an exercise. Accordingly we direct the Union of India to formulate a National Plan in terms of Section 11 of the Disaster Management Act, 2005 at the very earliest and with immediate concern.

4. The Drought Management Manual is undoubtedly a meaningful and well-researched document. However, in view of the submissions made before us by learned counsel for the parties, we are of the opinion that since the Manual was published in 2009 several new developments have taken place and there is a need to revise the contents of the Manual. We direct that the Manual be revised and updated on or before 31st December, 2016. While revising and updating the Manual, the Ministry of Agriculture in the Union of India should take into consideration the following factors apart from others:

(i) Weightage to be given to each of the four key indicators

should be determined to the extent possible. Although the Manual states that rainfall deficit is the most important indicator, State Governments seem to be giving greater weightage to the area of crop sown out of the cultivable area and not to rainfall deficit. For this reason, necessary weightage is required to be given to each key indicator.

(ii) The time limit for declaring a drought should be mandated in the Manual. Although it is stated in the Manual that the best time to declare a drought, if necessary, is October, we find that some States have declared a drought in November and December and in the case of Gujarat in April of the following year. Obviously this is far too late. The impact and effect of a late declaration of drought has already been mentioned in the Manual and it is not necessary to repeat it. Hence the necessity of a timely declaration.

(iii) The revised and updated Manual should liberally delineate the possible factors to be taken into consideration for declaration of a drought and their respective weightage. Haryana has added several factors as has been mentioned above. Similarly, Bihar has added some other factors such as perennial rivers while Gujarat has added factors such as the nature of the soil etc. While we appreciate that it may be

difficult to lay down specific parameters and mathematical formulae, the elbow room available to each State enabling it to decline declaring a drought (even though it exists) should be minimized. This would certainly be in the interest of the people who face distress because of a drought or a drought-like situation.

(iv) The nomenclature should be standardized as also the methodology to be taken into consideration for declaring a drought or not declaring a drought. The Gujarat Relief Manual, for example, apparently refers to "scarcity" and "semi-scarcity". The State Government appears to be hesitant to use the word "drought" even though a drought or a drought-like situation exists. Similarly, due to a lack of standardization in the annewari system of crop assessment, Gujarat takes 4 annas out of 12 annas as a base for determining if there is a drought-like situation. In areas where the crop cutting is between 4 annas and 6 annas, there is discretion in the State Government to declare or not to declare a drought. On the other hand, Maharashtra uses 50 paise as the standard the annewari system for declaring a drought. There ought to be some standardization so that each State does follow its own methodology in declaring or not declaring a drought.

5. In the proposed revised and updated Manual as well as in the National Plan, the Union of India must provide for the future in terms of prevention, preparedness and mitigation. Innovative methods of water conservation, saving and utilization (including ground water) should be seriously considered and the experts in the field should be associated in the exercise. Illustratively, dry land farming, water harvesting, drip irrigation etc. could be considered amongst other techniques.

6. The Government of India must insist on the use of modern technology to make an early determination of a drought or a drought-like situation. There is no need to continue with colonial methods and manuals that follow a colonial legacy. It is high time that State Governments realize the vast potential of technology and the Government of India should insist on the use of such technology in preparing uniform State Management Plans for a disaster.

7. The Secretary in the Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture in the Government of India is directed to urgently hold a meeting within a week with the Chief Secretary of Bihar, Gujarat and Haryana to review the apparent drought situation with all the available data and if so advised persuade the State Government to declare a drought in whichever district, taluka, tehsil or block is necessary. It should be emphasized that there

is no loss of face or prestige or dignity in the State Government declaring a drought if it is warranted, although succour to the distressed might be too late in the day. The Secretary in the Department of Agriculture, Cooperation and Farmers Welfare in the Union of India might also consider convening a meeting of the National Executive Committee and issue directions, if necessary, to the States of Bihar, Gujarat and Haryana and their Authorities in response to any threatening disaster situation or disaster.

8. Humanitarian factors such as migrations from affected areas, suicides, extreme distress, the plight of women and children are some of the factors that ought to be kept in mind by State Governments in matters pertaining to drought and the Government of India in updating and revising the Manual. Availability of adequate food grains and water is certainly of utmost importance but they are not the only factors required to be taken note of.

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(Madan B. Lokur)

New Delhi;
May 11, 2016

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(N.V. Ramana)