

Culprits of Parched Conditions: A Burning Issue in Maharashtra State

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Abstract

Maharashtra received only 50% average rain fall during June and July, 2015. Due to this, 34% of villages and 69% of taluks are suffering from the parched conditions. Maharashtra state is one of the most affected states of parched conditions in the country. The state administration is striving to cope up with severe dryness putting all efforts and outreaching the mass with relief aids. But, the dryness remains unprecedented and having a severe bearing on the common man's life as many people live from hand to mouth leaving no stone left unturned. Thus, the parched conditions in the state of Maharashtra remain a challenge for the state administration. Of the 225.56 lakh hectares of cultivable land in the state, 44.19 lakh hectares (20%) are irrigated, the rest rain-fed. This paper discusses the culprits for and impacts of parched conditions on day-to-day life and offers the remedies for handling and managing the parched conditions. This paper considers only Maharashtra state and the culprits and impacts vary from one state to other states and one region to other regions.

Keywords

Parched conditions, Farm activities, Livelihood, Common man's life, Scarcity of water, etc

I. Introduction

Maharashtra state is a home for many economic activities and so is the 'Oxford of East' for offering quality education in various fields including technical ones. Maharashtra is one of the fewer industrialized states in the country with higher per capita income and literacy rate as well. However, the state is badly affected by the parched conditions over a period of time. As a result, the life has been paralyzed due to such calamity and the life of a common man is extensively jeopardized even though one lives from hands to mouth leaving no stone unturned by striking a healthy balance between day-to-day earnings and essentials to keep the wheels moving forward.

The efforts made by the agencies to counter parched (drought) conditions are commendable. But, no one can conquer the almighty always being supreme in terms of dos and don'ts. Hence, the nature's rage is expressed by way of different catastrophes like extreme heat waves, torrential rains, severe cold waves, etc. On the contrary, the majority of geographical area in the country including Maharashtra state is victimized of acute dryness since decades. The parched conditions influence not only on the day-to-day life but on the future also that seems to be so dark that the life in parched areas may get vanished in the years to come. Thus, this paper discusses the culprits and impacts of parched conditions on the life of a common man and the paper also offers suitable measures to counter the culprits of parched conditions.

II. Objectives of the Study

The following objectives have been set for the present study.

- To study the various culprits for parched conditions;
- To discuss the impacts of parched conditions and

- To offer the suitable measures for handling and managing parched conditions;

III. Culprits of Parched Conditions

Parched conditions are not naturally born but rather manmade disaster as the nature is tortured in terms of no proper planning and implementation of any projects in time rather spoiling the existing conditions. It is how the following culprits of parched conditions are emerged and they are presented as under.

A. Scarcity of Rainfalls

A very due cause for parched conditions evolves from deficiency in rainfalls and geographical conditions as well. The rains play a very significant rule in the Indian context as the 75% of Indians are engaged in farming activities for their livelihood. No single seed can spurt nor can a floor blossom and spring without a single drop of water. If at all living beings exist on this earth it is because of rain drops. The life cycle of human, animal, plants, crops, etc begins from the cradle to the grave with the help of air, water and food. The climatic changes have caused immense damage to the nature's atmosphere and resulted in acute scarcity of rainfalls making life miserable.

B. Poor Water Storage Facilities

In India, many rivers flow full during rainy season and water merges into the seas without its proper storage at the appropriate places constructing dams across the rivers. Hence, so much of rainy water is let un-stored and such rainy water goes in vain. The corrupt autocrats and bureaucrats have become headache for the country since they do not show much interest in planning and execution of all water projects on time.

C. Abrupt use of Water for Irrigation

The cash-crops like sugarcane, turmeric, ground nuts, etc need more and more water for their growth. More farmers prefer growing of such cash crops to other crops. These cash crops consume more water till their harvesting. If water source is limited and such cash crops are produced, there would be obviously more use of water for irrigation and vice versa. The Maharashtra state is well known for the production of sugarcane, turmeric, ground nuts, etc. Hence, there is an abrupt and excessive use of water for irrigation in the state and so is the reason for parched conditions in Maharashtra.

D. Unscientific Water Management Practices

Every single drop of water is million worth these times as some resources like water, air, etc cannot be produced nor imported. The limited water source is to be properly managed by adopting the scientific water management practices which could save huge amount of water from draining.

E. Conventional Methods of Cultivation

Indian farmers still use the conventional methods of cultivation

like use of bulls, oxen, buffalos, etc for tilling the land and do use conventional methods of sowing seeds without seed treatment prior to sowing or plantation. This results not only in the fall of yield per hectare but it also leads to the consumption more use of water for irrigation. Thus, the conventional methods of cultivation have a bearing on the unnecessary more use of water for irrigation.

F. Negligence of Rain Water Harvesting

Indian farmers have small farm holding compared to other nations where the farm holding is high. The small farm holding does not attract the farmers to have rain harvesting facility as it requires more area for digging ditches and expenses unaffordable to small farmers who live from hands to mouth every count. On the other hand, the farmers are negligent of rain water harvesting as they do not realize the importance thereof. Hence, the Indian farming community bears the brunt of acute deficiency of water sources in the country.

G. Reckless Tree-Chopping

Fresh air is must for all beings for breathing and lasting long. The fresh is produced by plants, trees, grass, bamboos etc. The exploding population does not let any objects untouched because of greediness and lust for using trees as fuel substance and making furniture, home decoration & constructions, etc. Such unscrupulous activities force human being to chop trees recklessly without looking into the post tree-chopping hazards. Therefore, the reckless tree-chopping is a common practice in India for there is no strictest law to rigorously neither punish the offenders nor save the innocent trees. The deforestation becomes inevitable leading to dryness. Thus, the reckless tree-chopping endangers existence of life on the earth.

H. Defunct Methods of Irrigation

Plight of India farming community hangs in balance as they cannot afford to go for modern methods of irrigation rather they prefer the conventional ones that are affordable from what the farming community can. Conventional irrigation methods are rather defunct causing excessive use of water for irrigation with no option left.

I. Lack of Coordination

Though the Maharashtra state made unprecedented progress in the field of cooperation, the cooperative sector is now experiencing unsolicited progress as the liaison among cooperative societies is weakened due to political wars. Many cooperative societies have shut their doors forever. The cooperative irrigation projects, sugar factories, textile mills, dairy farms, etc have experienced a nosedive as the vested interest of political parties ruined the cooperative movement across the state. In other words, the irrigation projects undertaken by cooperative sector have been victimized.

J. Improper use of Pesticides

The hasty use of pesticides on variety of crops in the state has become a common phenomenon among the farmers to make money by hook or crook. However, the improper and unprecedented use of harmful pesticides has not only damaged environment but it also deteriorated health conditions of living beings over a period of time. And even many plants having no resistant power succumb to overdose of pesticides which in turn results in dryness.

K. Unprecedented Pollution

Varieties of pollutions like air, water, sound, land, etc. have emerged over the decades. Many developed nations have been causing pollution as result of industrialization leading global warming. In the recently concluded Paris summit, the world leaders have urged for curbing soaring climate change and agreed too. The pollution is a great source of the dryness and led to deficiency in rainfalls. Maharashtra being an industrialized state in the country omits huge amount of carbon and thus has become the victim of drought over a period of time. Rapid industrialization in Maharashtra omits pollutions like air, water, sound, land, etc.

L. Hasty Exploration of Natural Resources

Man goes beyond what the nature has gifted him bowing to his greed and lust for natural resources. The hasty exploration of natural resources through mining and digging earth has succeeded in the dryness. The nature is always supreme whereas the human being goes violent against it and leads to unprecedented nature's fury. Earthquake, drought, floods, fire, etc are the results of what it is called hasty exploration of natural resources. The movement natural resources start getting exhausted, the nature turns violent and vice versa. Among all the calamities, drought has server impacts on the day-to-day life. Therefore, the parched conditions have made life miserable and so on.

M. Emerging Concrete Forests

Uncontrolled, unauthorized and illegal constructions of residential flats across the state form concrete forests which are built up using cement and it has invited the parched conditions to the state as the cement slabs start burning during the summer season. Due to the heat waves, the temperature soars from 45 to 50 Degree Celsius and water gets evaporated over a period of time. Thus, the emerging concrete forests across Maharashtra are also one of the culprits of the parched conditions.

N. Unwarranted Industrial Policy

As the Governments at Centre and State is changed after every five years of their term in office, the industrial policies are also bound to be changed as and when there is a change of guard. The political parties inevitable change the industrial policies of previous governments according to their electoral manifest. Thus, one political party feels the industrial policy of the previous party unwarranted one and frames its own industrial policy. Therefore, the unwarranted industrial policies pose the parched conditions. The above discussed culprits of the parched conditions are few in number. However, their impacts have greater bearing on the day-to-day life of common in the present context. So the following are the impacts of the parched conditions briefed.

IV. Impacts of Parched Conditions

The parched conditions often revisit Maharashtra as the state has been experiencing such menace for the last three consecutive years. The life has been miserable and many people migrate from rural to urban places like Pune, Mumbai, Nagpur, etc for their livelihood leading to urbanization with increasing pollution. The following are the parched conditions that have adverse effect on life.

A. Acute Shortage of Water

Every living being and crop needs water for its sustainability and so water is required very next to oxygen to keep breathing and moving from place to place. Thus, the water forms the most

important part of our day-to-day life on this planet. When the rains take place, the water emerges there from wells, rivers, streams, etc start flowing and subsequently the ground water level increases. But, when it does not rain indefinitely over a period of time, the wells, rivers, streams get dried causing acute shortage of water for drinking and irrigation. Therefore, the life gets paralyzed due to non availability of water for drinking and irrigation. Such condition worsens day-to-day life in the surroundings and hampers the economy.

B. Traumatized Farming Activities

Clean air, pure water, fair sunlight, etc endurance proper growth of any crops provided all other ingredients are in place. But, the parched conditions will have adverse impacts on the growth of crops. The farming activities seek timely rains, favorable weather, tilling, etc for the increased production of agricultural produces. The seeds sown can germinate and sprout only when the seeds are fed with the required amount of water. Hence, due to dryness and heat waves, the farming activities get traumatized and production of agricultural commodities starts nose-diving.

C. Scarcity of Food Grains

The scarcity of rains cannot permit the proper production of agricultural products. And even standing crops can dry at any moment. The farmers are forced to prematurely harvest their standing crops and thus suffer loss of crops which subsequently leads to fall in the production of agricultural products. The Indian farming community still faces the problem of storage facility of farm products even after the six decades of independence.

D. Poor Shelter

Many rural people do not have proper shelter facility as they keep on moving from one place to another place during parched conditions in search of livelihood. This tendency can force the people not to have permanent shelter to cope up with the severity of dryness. Therefore, the life in Maharashtra is miserable and pathetic during parched conditions.

E. Paralyzed Livelihood

The rural mass is posed to face severe parched conditions which adversely hamper the rural livelihood and suffer from shortage of food grains. Mass people strive to cope up with the shortage of livelihood. The farming activities become standstill. No power, no water, no work for agricultural labours for example.

F. Health Hazards

It is clear that the shortage of nutrient food and pure drinking water that is wanted more during summer season. The consumption of sufficient water and nutrient food during dryness has deep influence on the health condition of populace. The health hazards are expected during parched conditions.

G. Fall in Literacy Rate

Owing to the poverty and illiteracy, people in the rural areas do not prefer to send their wards to schools and colleges as they are not able to earn livelihood, to pay fees and buy clothes. The parched conditions have a direct influence on the education because the children in the drought affected areas are compelled to stop going to the schools and colleges rather they are forced to work on daily basis to support their parents and to counter the parched conditions. Thereby, the literacy rate drops owing to the dryness.

H. Worsen Livestock

Animals are integral part of life in Maharashtra in particular and in India in general. They are used for different purposes. For example, oxen are used for tilling the land whereas cows and buffalos are used for milk production. The life of such innocents is badly affected on account of the parched conditions in Maharashtra due to acute shortage of fodder for many animals.

I. Scanty of Fodder

Fodder is the main source of feeding live stock like cows, buffalos, sheep, goats, oxen, bulls, horses, etc. Deficit rainfall does not permit the farmers to grow more and more grass, maize, jowar, sugarcane, etc that require huge amount of water for their production. Hence, the parched conditions adversely affect the production of required amount of fodder for feeding cattle. It is very important to note that the live stock is the integral part of farming activities in the Indian context.

J. Fall in Growth of Village Industry

Village industry that includes Khadigramodyog, Handicraft, Poultry, Carpeting, etc is paralyzed during parched conditions has also become the victims of the parched conditions in Maharashtra. The producers of goods of village industry do not find market for their product since consumers of such products strive to just earn their livelihood.

K. Impaired Services

Variety of services like electricity supply, water supply, milk supply, community and social services, transportation, banking, insurance get affected during parched conditions as the affected mass are subjected to spend less or prefer minimum spending.

L. Non Availability of Essential Commodities

Food grains, milk and milk products, medicines, groceries, and so on get affected during the parched conditions. The non availability of these essential commodities influences on the health of people.

M. Fall in Per Capita Income

It is necessary to note that the fall in farming activities encourage people not to spend more on various necessities as a result of parched conditions that hampers farming activities and lessens production of agri-produce and subsequently decline in per capita income. Tumbling employment opportunities owing to the parched conditions can lead to fall in per capita income as the farming activities get affected due to the shortage of water availability for irrigation. The better the intensified farming activities and employment opportunities the greater is the per capita income and vice versa. Therefore, the parched conditions cause the reduction in per capita income if the dryness remains unprecedented.

N. Postponement of Marriages in Rural Places

Many unmarried youths-girls and boys have come forward saying that they would prefer postponement of their marriages to spending a lot of their parents' money on their marriages a costly affair in everybody's life. Youths who have crossed age of 18 to 21 years in the state have decided not to get married for the time being as they are under the severe grip of parched times.

O. Poor Birth Rate

The rural people being the victims of parched conditions prefer not to have more children when they struggle to feed the existing

family members as they are not able to get what we can say a onetime meal for the entire family members under severe parched conditions. Therefore, the rural women postpone conceiving a child during parched conditions. Thus, the birth rate during the parched conditions may get affected.

P. Fall in Life Expectancy

The parched conditions can have an adverse effect on the life expectancy and people cannot bear the brunt of heat waves. The non availability of food and water on time can deteriorate health of people who will have poor resistance power in their bodies. They will not be able to last with the thirsty and hungry stomach. Thus, the life expectancy can get affected due to parched conditions.

Q. Death Due to Malnutrition and Heat Waves

Rural life in the parched conditions in Maharashtra state has been miserable owing to the non availability of nutrient food in the state and heat waves sweeping the majority of the affected areas. The malnutrition and heat waves lead to death of living beings.

R. Tumbling Soil Moisture and Ground Water Level

Atmospheric parched conditions adversely affect the recharge of soil moisture and ground water level over period of time when dryness remains unaffected. The tumbling soil moisture and ground water level further enhance the adverse atmospheric conditions.

The foregone discussion on impacts of parched conditions seeks the some remedial measures in order to counter the parched conditions. The following remedies are offered for handling and managing the parched conditions.

V. Measures for Handling and Managing the Parched Conditions

The natural calamities such as earthquake, floods, drought, etc are inevitable on this planet and bound to occur at intervals. The challenge before human kind is how to handle and manage the disasters properly with necessary aids to be provided before the conditions worsen during the natural disasters. The efforts are made in this paper to offer some remedies to properly and effectively handle and manage the natural calamities namely parched conditions in Maharashtra in particular and in India in general.

A. Mass Tree Plantation Programs

The awareness about mass tree plantation is to be created among the people so that the trees which get clouds attracted and cause rainfall. The mass tree plantation programs are the need of the hour in Maharashtra. The state administration is to ensure that the all the village panchayats in the state must start the mass tree plantation programs on the one or other occasions.

B. Timely Implementation of Irrigation Projects

Another menace in the state is that the irrigation and power project are not timely implemented in the state due to the poor political will and red tapism and favoritism and lust for power and money. Many irrigation projects get delayed as the change of power from party to parties and lack of political support. Hence, all irrigation projects must be commenced at the earliest and completed in time bound manner.

C. Proper use of Water for Drinking and Irrigation

Every drop of water is incredible and fetches its own worth as

the parched conditions prevail in the state. Food grains, milk and milk products, other essential commodities can be procured from faraway places. However, it is very difficult to procure in water and fresh air to a place where they are in short or say not available. The farming activities need water for different crops till the harvest takes place. The improper use of water is observed in the Indian agricultural sector. Hence, it is the need of the hour for proper use of water for drinking and irrigation purpose..

D. Scientific Water Management Practices

The scientific water management practices have now been acknowledged as most sought after means for the fruitful utilization of deficit water resource especially in the area hit by unprecedented parched conditions. The scientific water management practices are to be adopted or made available particularly in those areas where dryness remains a major problem of cultivation. The agencies having authority need to go for scientific management practices in the state of Maharashtra and elsewhere to effectively manage and control parched conditions in the future as well.

E. Advanced Methods of Cultivation

The cultivation of land is another important aspect of the India rural life. The farmers cannot afford to have the advanced farm equipments which ease the cultivation activities and save cost of production too. However, these advanced farm equipments are dear ones to farmers who strive to cultivate their land with the conventional methods of cultivation and so the yield nose dives and the cost of productions soars. It is therefore, necessary to use advanced methods of farm cultivation for better crop yield with the reduced cost of production during parched conditions.

F. Mandatory Rain Water Harvesting

There are many measures that can be initiated to fight against the parched conditions. Among several measures available, the rain water harvesting is a simple measure that can be easily implemented at different places where the rain waters get drained to streams, rivers, sea and ocean. It is advisable to make rain water harvesting mandatory by village panchayats, taluka panchayats, jilla panchayats and states as well. If the rain water harvesting is successfully implemented across a village or a tahsil or a district or a state, the parched conditions can be minimized. Therefore, it is up to the concerned machinery to make the rain water harvesting mandatory.

G. Strictest Law Against Abrupt Tree-Chopping

It is very common in India that many innocent trees are abruptly chopped without taking precautionary steps to have alternative trees. Such unwarranted chopping of trees definitely triggers shortfall in rains and thereby water shortage is evolved. Thus, to prevent or curb the abrupt tree-chopping, there shall be very sound law to strictly prosecute and punish the offenders and their accomplices as well so that the abrupt tree-chopping can be brought under control in the years to come.

H. Modern Methods of Irrigation

The water being used for farming is not logically utilized rather utilized abruptly causing a great shortage of water for irrigation as the traditional methods of cultivation are still in practice. The traditional methods of cultivation demand for excessive water for irrigation and thereby the available little water falls short and subsequently the standing crops get dried well before they are harvested. Hence, the need of the hour is to insist on the modern

methods of cultivation tilling the land for farming so that the available little water can be effectively utilized and the desired yield can be obtained/produced

I. Effective Coordination and Cooperation

The major issue is among stakeholders who generally do not coordinate and cooperate with each other as far as sharing of canal waters or stream waters or river waters at villages or at tahsils or at district or at state level is concerned. The disputes surrounding the equitable water sharing are not properly sorted out rather fuel is added to fire by the like minded political parties for their personal gains.

J. Proper use of Pesticides

The use of pesticides is becoming more and more vulnerable to the environment in Maharashtra these years contributing to the polluted air and drinking water, if consumed, they affect the health. There shall be some proper regulations for use of many hazardous pesticides being used by farming community. However, there are some pesticides which boost sudden growth of tasteless fruits, vegetables, crops, etc if consumed without proper treatment they pose a great threat to our health. Hence, it is necessary for proper and controlled use of many pesticides and control the spread of several diseases thereby as well.

K. Pollution Control

Environment pollution that consists of water pollution, air pollution, sound pollution, etc is to be curbed and brought down for better quality life. If pollution is not controlled in time, the life becomes more miserable and animals cannot last long. The urge is to cap the pollution explosion and thereby mitigate the problems arising out of pollution. Therefore, more measures are to be initiated to bring down the soaring pollution so that the future generation may breathe quality air and drink drinkable water.

L. Prevention of Exploration of Natural Resources

The unwarranted exploration of natural resources can cause a great loss to future life. Hence, the need of the hour is to prevent exploration of natural resources in Maharashtra. Natural resources are of the great importance and indispensable for the future life. The hasty exploration of many natural resources can lead to dryness and continue to have adverse effect on rural life. The need of the hour is that existing natural resources like coal, oils, gasses, ores, etc must be preserved by curbing illegal mining and explorations. If such natural resources are preserved and maintained, the prevailing dryness may be minimized and it can pay the way for long lasting natural resources and maintain ecological balance that would be conducive for rural life in the years to come.

VI. Conclusion

The foregone discussion enlightens us on the culprits of parched conditions and their impacts on day-to-day life of common men and there are remedial measures offered for better handling and managing the parched conditions so that the menace can be controlled but cannot be completely wiped out. At present, Maharashtra is in the severe grip of parched conditions. The majority of districts in the state are suffering from acute shortage of water. A single drop of water is worth of millions of dollars. For example, the state and central governments have initiated steps like supply of Miraj water through trains to the parched Latur city. Many incidents of fights, deaths and murders have been reported in the state due to scarcity of drinking water. Therefore, the need

of the hour is that the precautionary measures must be in place before any major tragedy takes place.

Moreover, the political will must set forward for countering parched conditions through proper planning and implementation of all irrigation projects and cap on the use of water by each family every day. The people of the state must also realize the importance of proper use of the water for drinking, daily consumption i.e. washing clothes and utensils and irrigation. If the state machinery remains lethargic about parched conditions, the state may head to nowhere or may get burnt alive in the future.

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