

Change in Climate in Bundelkhand and Challenges for life

Sachin Kumar Jain¹

Livelihood Crisis

Two years back, Shripal lived in a small village of Chhatarpur district with his 30 members' joint family. His family used to cultivate their field (40 bigha) and also had 35 livestock. Thus he was living a safe and dignified life in his village with his family as he could get enough grain and money through farming and selling milk. But Shripal and his three brothers have become Rikshaw puller, because drought has haunt the people of Bundelkhand and has compelled to live them with insecurity, Shripal and his brothers have invested in agriculture and paying debt by Pulling Rikshaw. They could get nothing as drought relief from government. As a Rikshaw puller could get hardly 5 to 8 rupees for a trip to any place within chhatarpur city, and he has to pay 20 rupees per day to the owner of Rikshaw so Shripal and his brother could get money only to manage food for his family, even clothes was a far dream for him. One of these 4 brothers has gone back to village after uncertain rains, but they find it difficult to answer that when they will be able to come out from this poverty cycle?

Rain started before monsoon at most of the villages so people couldn't plough their fields and they couldn't sow any crop. In certain challenging situation, like today in Bundelkhand, villagers can hope support from state support system, but 4 years drought have passed just with conflicting relations between center and state. In fact politics should contribute positively in crisis, but actual

¹ **Vikas Samvad**, E-7/226, 1st Floor, Opp. Dhanvantri Complex, Arera Colony, Bhopal, Madhya Pradesh, India. contact - sachinwrites@gmail.com

happening in Bundelkhand is just opposite and political ideologies could not come together to fight hunger, livelihood insecurity and environment protection.

Gauri Shankar has cultivated 18 rows of betel leaves (Paan). But this is a gamble that he has lost. According to him, Paan is planted every season between the periods of 20th February to 20th March. To ensure that the crop flourishes, it should not be exposed to temperature beyond 30 degree Celsius till about 3 months after its plantation. For this purpose, the farmers have to turn the cultivated area into a temporary shed made out of straws and twigs and then cover it up. However, Gauri Shankar says that he has planted paan when the temperature had already touched 35 degrees in sowing period of Paan. This situation had never been witnessed by earlier generations. These experienced producers of betel leaves are capable of measuring the temperature of the atmosphere by merely spreading their hands in the sun or feeling the ground by their bare feet.

The impact of climate change is evidently visible in Bundelkhand region of Madhya Pradesh. It has, in last 7 years, changed the life beetle leaf producers and farmers. Climate change has hit the agriculture based livelihoods and food grain production in the Bundelkhand districts has decreased by 58%, it is very serious for the agriculture based society and economy. Failure in agriculture has become a cyclical phenomenon in the Bundelkhand region of the State.

This year (2008) went well in terms of rainfall, but it could not contribute for positive change in the life of small and marginal farmers. It rained continuously for three- four days and poured the fields of low terrain so people couldn't cultivate such fields. They are waiting for next crop but it needs much investment than of that. As either rain touched the soil before sowing schedule or it came late, when it was expected. The other side of the picture gives a painful sense from insecurity in farmer's life. Due to drought, they had used all their collections and savings, so they could not invest in agriculture this year. They had no money to purchase seed, fertilizer and pesticides. In fact they were not in a position to take risk, in terms of loan or credit.

The drastic changes in climate have been brought in last few years due to the shift of agriculture land to profit-driven industrial lands. And the penalty of these changes is not paid by those who are

actually responsible for it. The ultimate effect of climate change is being faced by the natives of Bundelkhand where the monsoon has restricted to 24 days instead of 52 days during the past 8 years. State has declared that Tikamgarh and Chhatarpur districts are out of the crisis of drought this year claiming that the region has received more than the average rainfall. But do the scholars defining the drought aren't aware of the fact that if the average rainfall is received in just 20 days instead of 45-50 days than also the situation is considered critical? All these realities are evidently showing that the Bundelkhand is still facing the grave tragedy of drought!

Relief is no more relief

These poor farmers are totally dependent on the government but the government has chosen to remain ignorant of the real problem. Lastly the Administration showed a soft corner for the victims of drought and decided to give compensation of Rs. 1200/- to cover the loss of agricultural produce of 1 acre land. It seems that the farmers are not more than beggars for Administration. Also it shows the value of agriculture in the priority list of our State Government. Moreover, the process of allocating this diminutive amount is so inhumane that most of the farmers have refused to take the same. The compensation is being given according to the old revenue records of Patwari and in these records one piece of land is shared by 18 to 20 individuals. So the compensation cheque was made including the names of all the members (18 to 20). Rs. 1200/- for 18 to 20 members, how to manage!! Besides this each and every member should be present individually so as to encash the cheque. Now some of them are either passed away or have left the village, how to get the compensation in such a contrary situation is a big question. This evident clearly illustrates that the bureaucrats and public representatives of the region are in a disposition of confining the agriculture lands for business purposes. Here lives Rampal Singh Ghosh, the owner of 40 Bigha land that once used to be fertile and well irrigated. Rampal Singh belongs to village Tila that has been reputed for its production of Brinjals and Gourd (Lauki) since times immemorial. Out of the 387 families in Teela Panchayat, 302 families have been cultivating vegetables as their primary occupation. Till 3 years ago, upto 17 to 18 trucks of vegetables were transported in surrounding big cities like Jabalpur, Bhopal, Indore, Jhansi and Agra. These cities had a massive demand for vegetables from the Niwari Block. But today, the situation has turned around shockingly and only 1

truck full of vegetables can be sent to these places in two days. The farmers estimate a plunge of 70 to 80% in the production of vegetables like Gourd, potatoes, Capsicum and Brinjals. They also say that about 80% farmers have stopped cultivating vegetables completely and this includes small and marginalized farmers.

Climate Change

Now in Bundelkhand, it is difficult to predict the weather. Earlier we used to have a planned approach towards agriculture and livestock management based on a systematic analysis of climatic system, but now in summers it gets stormy and we have rains in deep summer. In fact in monsoon, we don't get rains, it is missing and in the end of winter it is so cold that all our vegetables, wheat and other crops fail – says a group of farmers in Teela village of Tikamgarh district of Bundelkhand region in Madhya Pradesh.

After 4 years, this season we saw rains, but in the second week of June alone the region received around 32% of its total rainfall, farmers were not prepared for sowing. Then till July 2008, most of the Bundelkhand parts received around 55% of its total average annual rainfall. This change caused floods and widespread losses in livestock and top soil. The dismal state of agriculture in these regions has also affected the condition of livestock here.

Most families in the affected regions have either lost their cattle to drought or have set it free to find its own means of survival. As the villagers themselves struggle to live each day as it passes, the survival of their cattle is the last thing on their mind. Hakkim Singh Yadav of village Wignpur, who was once the owner of 37 cattle, unhappily tells that there are only seven left today. In this uncertain behavior of the climatic system, bounty rainfall could not make much positive impact on the agriculture, livestock and other livelihood systems in Bundelkhand. The field experiences in Chatterpur and Panna districts also show that unequal rainfall has shown its presence. In fact it is also visible that due to deforestation and frequent droughts in last 15 Years, the overall capacity of the region in Harvesting and storing rainwater for the future has substantially reduced.

In recent years Eastern Madhya Pradesh was severely hit by dry monsoon. In fact 39 districts were declared drought affected last year (in 2007-08), and most of them belonged to Bundelkhand region. This year (2008-09), droughts has moved towards western Madhya Pradesh and 21 districts have already scanned as scarcity district (districts where rainfall deficit between -20% to -59%), among them seven districts

(Chindwara, Dewas, Harda, Hoshangabad, Sehore, Khargone and Panna), have received deficit of 40% of their average rainfall. This trend shows that Madhya Pradesh is becoming a drought prone geo-cultural region.

Livestock Crisis

The horrifying experience in Bundelkhand is – Now wheat and Cattle fodder is to be purchased on same price. The cost of one trolley fodder is around Rs. 2500 now, and villagers used to get it for Rs 200 in the year 2004. Fodder crisis has also been pushed by the disturbing environmental cycle. The impact of climate change is evidently visible in Bundelkhand region of Madhya Pradesh. It has, in last 7 years, changed the life beetle leaf producers and farmers. Climate change has hit the agriculture based livelihoods and food grain production in the Bundelkhand districts has decreased by 58%, it is very serious for the agriculture based society and economy. The land and people of Bundelkhand are facing the crisis of drought continuously for past 4 to 5 years.

The drought has shattered the villagers' hope of earning a dignified living in the past few years and this year they were not having any choice except for rain. See the coincidence, that this year the Bundelkhand region received a remarkable heavy rainfall. Now the question is that whether the rain fall is enough to meet out the prevailing evils of hunger, water crisis, food security and livelihood crisis aroused due to continuous drought conditions? This monsoon when came with water, the farmers are standing empty handed just watching the lands because they are not having enough wherewithal to fetch seeds for farming. About 76% farmers of the region have lost almost every thing there agriculture land, livestock, other assets and some have even lost there proper shelters. In Bundelkhand culture, livestock have been one of the key factors for the agriculture based livelihood systems, but unlike agriculture, there has been no policy for the livestock protection in Madhya Pradesh. A field study conducted by Parhit organization in Tikamgarh district shows that last 4 years have passed for some, who could survive, but animals have passed away in these years. According to their study, 10 studied villages had 55400 livestock (Cow, Buffalo, Goat, Sheep etc.) in the year 2004, but now only 15960 could survive and other 39440 (71% of the total livestock population) animals either have been left to forest or died due to lack of fodder and water.

The families of Bamhori Aapda now have 1500 livestock, as against the 8000 cattle population 4 years back. There is no provision for compensation, if cattle die. In a sense livestock has not been accepted as resource in state policies. In such context, Villagers say – What we can do, we are not able to feed them

and government has not made any visible and resultful arrangements for their survival. We can't see them dying, so we have gracefully detached them from our life. Challenges for livestock based livelihood dependents are too hard now. There is no protection mechanism or policy priority has been shown by the policy makers of development managers. There is a continuous decline in the livestock population in Madhya Pradesh. The total cattle population has crashed from 28687 thousand in 1992 to 17943 thousand in 2004. Buffalos are struggling for survival, their population has gone down from 7970 thousand to 7026.8 thousand, there used to be 836 thousand sheep and 8370 thousand goats in 1992 but now they are only 570.4 thousand and 7530.7 thousand respectively as per the livestock census data provided by the Veterinary Department. How irresponsible our state behaves towards the agriculture and livelihood based society, budget allocations also prove it.

Government of Madhya Pradesh has allocated an amount of Rs. 272 Crore for the Department of Animal Husbandry, it is only Rs. 0.01 per unit (Like Cattle, Buffalo), out of this 78.31% alone goes in Salary and allowances. On the one hand, in recent years, Madhya Pradesh government has been converting Grazing land to private or revenue land by transferring it to individuals or other commercial interests. It also limited the options in terms of Livestock survival. And on the other hand Forest department has been too hard to stop cattle's entry in their departmental empire or in the Forest for grazing in the name of forest or wild life protection. Now it is very common to note conflicts between villagers and forest department officials in day to day life. In present time there are 17682 registered cases in these conflicts against villagers. It may not be difficult to analyze who is violating the law and for what?

State negligence

The state government had promised a lucrative future for the region of Bundelkhand through investors' meet held at Sagar but agriculture still lags behind from making it to the priority list of the state. Bundelkhand region of Madhya Pradesh has traditionally been considered as one of the most prosperous parts of the State. This region has produced enough agricultural produce, both for domestic consumption and export, for generations together. But the production has been continuously decreasing for the last 8 years and today the region is producing even less than half of its capacity. And the State Administration rather finding the solutions to the failure of agriculture is giving more attention to industrialization and promoting exploitation of natural resources by allowing multi-national corporations to invest heavily in the Bundelkhand region. On one side the conditions of natives of region is becoming worse day by day and on the other side the State is praising itself for fetching an investment plan of fifty thousand Crore from private companies in

Bundelkhand. Majority of these investors preferred to invest in mineral-based industries like steel plants, cement, beneficiation of iron and coal, Jatropha plantation, industries of purified food items etc. The state government is also promising investors the availability of water, power and other policy support in the name of development. However not a single sanction has been proposed in the agriculture sector. All these industries will destroy the productivity of lands; exploit a huge amount of water, as a result the land of Bundelkhand well known for its productivity and jungle heritages, will become barren. Ultimately farmers and poor and marginalized communities are left alone with un-answered questions of insecurity in Bundelkhand region.

**Vikas Samvad, E-7/226, First floor, Opp. Dhanvantri Complex, Arera Colony, Shahpura,
Bhopal, Madhya Pradesh. 0755-4252789**