



## Impact of climate change on livelihood of adivasi tribal community in Dooars area of West Bengal

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### Abstract

Climate Change is adversely affecting the Adivasi tribal community in Dooars area. In our Dooars areas mostly Adivasi tribal community work in the tea garden and make their living. Due to climate change, and its impact on tea agriculture, the quality of tea leaves is deteriorating. Because of this, a lot of changes are being seen in the livelihood of those people and this is making things worse for them.

Due to climate change, extreme heatwaves increase carbon dioxide levels, which is causing different types of diseases. If we show some global records then we found that due to climate change, there has been a 50% increase in the number of heat-related death, especially those people who are above 65 years and who are not able to take healthy foods. (Souza, 2022) <sup>[3]</sup> The doors Adivasi community's men and women both work 8 hours a day in heat, rain, and very cold weather. Then it is a matter of thinking that how much impact will be having on them due to climate change. Climate change has a greater impact on people who are unable to consume healthy food. Adivasi community is unable to eat healthy foods due to low earnings. Because of this, created health-related diseases from climate change like Skin Cancer, Lung Cancer, Mental Illness, etc. (WHO) Here in this paper, the author wants to examine the impact of climate change on the livelihood of Adivasi tribal community in dooars.

**Keywords:** Climate change, adivasi, tribal, livelihood, impact

### Introduction

The Adivasi already have a very close relationship with the forest. Most of doors Adivasi communities do not live in the urban area. (Manjula, 2020) and in the Dooars area, the main occupation of the Adivasi community is working in Tea Garden. Most of them are not even educated. Due to this, the thinking of creativity and innovation in them is much less than the other community people. It does not mean that they lack their mindset. If there is no encouragement, then how will these people rise above their environment? If we talking about the occupation of the Adivasi Community then that is the only one that is to work in the tea garden and the government says this is their employment. If he or she does labor work for about 8 hours a day, he or she gets 190-250 rupees a day. And if they do not go to work for any day for any reason, they do not get money. So, the rate at which inflation is increasing, running their house with such little money, and managing their children's education expenses is a serious matter for them. In these circumstances, thinking about healthy food is a far cry, they even did not get some time rice and pulse for eating. They get their payment every month and also twice a month. Whereas some tea garden gives their payment every month on time whereas some are unable to give them on time.

Their livelihood is likewise below the poverty. The impact that it has on climate change is no less than a dark shadow. The lack of education, they are not able to know about the impact of climate change on them. But the subconscious mind helps them a little to understand the circumstances. Talking about the current situation in doors area, almost 70% of the Adivasi community in this area do labor work in the tea garden. And almost 95% of the Adivasi community rear chickens, pigs, goats, etc. in their house according to survey. The impact of climate change on agriculture is huge. It is not only in our country but in the whole world. Three

districts of west Bengal fully come under Dooars area that is Jalpaiguri, Alipurduar, Cooch Behar. The southern part of Darjeeling and a few areas of Kalimpong district also fall within the Dooars area. And, few areas of Assam state come in Dooars area. If we talk about the population of tribal communities in West Bengal, then we find that the total population of tribal communities in West Bengal is almost 52,96,953 as per the census 2011 which is 5.08% of the total population of tribal communities in India. (WBTDD) And in the Dooars area, almost 27% Adivasi community lived in West Bengal's total population of Tribal communities. And in West Bengal Adivasi community is 5.8% of the total population of west Bengal. (WB Census, 2011) In the Dooars area, Jalpaiguri and Alipurduar districts have the highest number of Adivasi communities. And If we talk about the National Family Health Survey 4 (2015-2016) then we found that the Under-5 mortality of the Tribal population was 57.2%. And the Infant Mortality Rate (IMR) is 44.4 per 1000 live birth. If a child is born in a Tribal community family then there are 19% more chances of dying in the neonatal period. (NFHS) And 45% more chance in the post-neonatal period. (NFHS) Which is much more than other communities. All these data show the very bad condition of Tribal communities all over India and especially in the Dooars area of West Bengal.

In Dooars Area almost everyone in the house of this community works under the open sky in the tea garden, except little child and who would not able to work like old people, etc. In such a situation, climate change affects them a lot. Due to the scorching heat, many people even faint. And in that way, they all depend on government hospitals for their health treatment.

In such a situation, the effect of climate change on the tea garden greatly affects their living conditions. About 30% of the Tea Garden in the area of the Dooars has been closed according to survey. Due to poor production, some such

gardens are running in deficit. That too is almost on the verge of closure. The situation that is coming due to climate change. Due to strong heat, rain, and cold, people of weak health are not even to work. And they are becoming victims of various diseases. Due to this these people are slowly moving to the city area and are earning their living by working in small shops. Most of their houses are made of Clay, Tali, and Tin like in a primitive way, which is also not conducive to climate change. Due to this even staying at home has become like giving birth to diseases for them.

### About Climate Change

Before understanding about Impact of Climate Change on the Livelihood of the Adivasi Tribal Community in Dooars, we need to know about climate. What is climate? So, the origin of climate is derived from the Greek word 'Klima' which means 'Inclination', 'Slope', or 'Latitude'. And very interestingly Klima word also is made through the Greek word 'Klinein' which means to lean. (Webster, 2022) The idea for the study arose from work tracing the origin of the word 'cryosphere' and the long-standing interest of the authors in the historical development of climatology. (AMS) Climate is the average weather of a particular local area for about 30 to 40 years is called the climate of that place. (WMO) Weather is the momentary state of the atmosphere while climate refers to the average of the weather conditions over a longer period. And when there is any change in the climate then it is considered climate change. And we also need to know here that, which things are affected by climate change. Climate change directly or indirectly affects everything on the earth. Indian climate is the Monsoon type of climate. In India, there are different types of climate, but monsoon tries to balance them. Climate change is increasing very fast in India we are beginning to see the effects of climate change in India in a very clear way. Like the melting of Himalayan snow, the rise of sea level, the coming of the cyclone, irregular rainfall, a higher-than-average increase, or the occurrence of heat are affects in all parts of India.

Talking about the factors of climate change, we can easily understand all the factors by looking at the main two factors. Those two factors are human beings and nature.

From the international organization for climate change, we know that climate change is accelerating. If we look at the impact of climate change, it affects not only humans and their health but also the entire ecosystem. (IPCC) We know that an animal needs a suitable climate so that it can survive its life, but if the climate does not suit them, then it cannot survive. For this reason, due to the melting of snow in the earth's axis point pole area, the animals are not able to survive. And their numbers are dwindling. And that is only because of this climate change the birth of new types of bacteria or creatures adapted to the climate is also possible. Which will be very effective for our ecosystem and human beings. Here in this paper, I have tried to focus on the effect the climate change on the Adivasi tribal community of the Dooars area of West Bengal.

### Impact of climate change on the livelihood of the Adivasi tribal community of the Dooars area of West Bengal

How the livelihood of the tribal community is affected due to the impact of climate change? That is necessary for us to know. Because India is a diverse country. But we have to tie everyone in unity. And only by being united in the bond of

unity, we can fight against all kinds of calamities. Then let us see the important impact on the livelihood of the Adivasi tribal community due to climate change in the following way.

#### a. Impact of climate change on the health of the Adivasi tribal community of the Dooars area:

Due to climate change, these people are falling prey to various diseases. Climate change is affecting them more than the common people. The main reason for this is working for a long time in the open sky, not consuming healthy food, do not take much care of cleanliness, and not having the right dress to adapt according to climate change. Due to climate change extreme heatwaves increasing carbon dioxide levels, which is causing different types of diseases. If we show some global records then we find that due to climate change, there has been a 50% increase in the number of heat-related death, especially in people who are above 65 years and who are not able to take healthy foods. (Souza, 2022) <sup>[3]</sup> And the doors Adivasi community men and woman both works 8 hours a day in heat, rain, and very cold weather. Then it is a matter of thinking that how much impact will be having on them due to climate change. Climate change has a greater impact on people who are unable to consume healthy food. The Adivasi community is unable to eat healthy foods due to low earnings. Due to which health-related diseases from climate change like Skin Cancer, Lung Cancer, Mental Illness, etc. Climate change is such that giving rise to even small diseases. It is also causing huge and costly diseases. Due to this, the condition of the Adivasi community is getting worse. By the way, many people do not even go to the hospital considering it as a minor illness, due to which sometimes they have to lose their lives. Many do not even get their treatment done for fear of not having money. And in this way, many people are dying. From a survey of the Dooars area, I learned that common people of the Adivasi community here mostly suffer from headaches, fever, skin diseases, and lack of hydration. It is the effect of climate change directly or indirectly which we cannot deny.

#### b. Impact of climate change on the production of tea leaves in the Dooars area:

Dooars area is very famous for tea agriculture. West Bengal is one of the major states for Tea cultivation in India. And all we know is that the Darjeeling district is known for its beauty and Tea production. And all the workers associated with this tea plantation. From them, mostly of workers belong to Adivasi tribal community. From this, we can say that the main occupation of the tribal community in the Dooars area is working for tea plantations. Which is closely related to their livelihood. Now if we talk about climate change, it is affecting the tea plants to a great extent. For example, due to more heat, the fertility power of the soil decreases. Because of this, the moisturizer of tea leaves is also getting spoiled. Due to this, production is going on, but the quality is being affected. And for that, the demand and price of these leaves are also getting reduced a lot. This is directly affecting the Adivasi community's livelihood. Excessive rainfall due to climate change also damaged the tea plants for that water reached the leaves in large quantities. Due to this, the quality of the leaves is

getting damaged. All these have a direct impact on the livelihood of the Adivasi tribal community.

- c. Impact of climate change on the children of the Adivasi tribal community of Dooars area:** Climate is related to all aspects of our life. If we talk about the children of the tribal community of the Dooars area, whose age is about 5 to 16 years. Then we know that the most important task of children at this age is to study and children need a complete diet to stay healthy. But due to climate change, the mentality of these children has been affected more. Due to this they are less interested in studies and are more interested in fulfilling their needs and their family's needs by earning some money by going to small works. However, their parents try to keep them away from working by somehow arranging money and asking them to study. We know that children have a lot of enthusiasm. But still, if they do not get good food, then they become weak. For this reason, more and more children of the Adivasi community are becoming victims of mental illness due to climate change. And along with this, children are also becoming victims of depression due to many reasons. And it would not be wrong to attribute climate change as one of the reasons for all this which is directly or indirectly linked. If we look at some surveys on the tribal community in India, then we got some idea about their livelihood condition not only for the Dooars area but also for all tribal communities of India. For example, if we talk about the National Family Health Survey 4 (2015-2016) then we found that the Under-5 mortality of the tribal population was 57.2%. And the Infant Mortality Rate (IMR) was 44.4 per 1000 live birth. If a child is born in a tribal community family then there are 19% more chances of dying in the neonatal period and 45% more chances of dying in the post-neonatal period. (NFHS, 2016) This data shows us the very bad condition of tribal communities in India.

In today's increasing inflation, because of climate change, parents are not able to run the house with less money in the Dooars area. Seeing this, the children are also affected. Due to this, they are also showing less interest in studies and more interest in earning money.

- d. Impact of climate change on the job security of the Adivasi tribal community in the Dooars area:** Most of the Adivasi community of the Dooars area are living in a forest or tea-garden areas. They used to cook food from whatever wood they collect from tea gardens and forests. When the production and profit of tea gardens are good then the workers feel good and secure because then the managers of tea gardens can pay their monthly on time to their workers. Whereas if the production and profit go down then the workers feel not secure. Tea garden profit also depends on the good quality of production and the poor quality of production. Because supply and price depend on the quality of production. The production also can be measured with good quality of production and bad quality of production and most of the Dooars tea gardens are affected by climate change. So, climate change directly effects on the quality which is the biggest threat to them. Even now still they are working in the tea garden for 8 hours as before. But the

present climate has become very different from the earlier climate. Due to climate change, the quality of tea leaves in tea gardens has decreased considerably as compared to earlier. And for climate change, working for 8 hours in hot, rainy, and cold weather is giving rise to different types of diseases for them. When they feel insecure in their job then many of them go outside to their tea garden for doing other work as per their knowledge. But Education is a must for any good paying job. That is why they work in small shops or labor due to not having an education in this Adivasi community which is making their life insecure.

- e. Impact of climate change on the pet animals of the dooars area:** Almost all the Adivasi tribal communities of the Dooars area keep pet animals or livestock at home. With which their livelihood is also linked. Climate change is affecting everything equally whether it is human or animal. Due to this, climate change is also affecting livestock. If we talk about the pet animal of the tribe community in the Dooars area, then they mainly pet cows, goats, pigs, hens, and ducks. (The effect of climate change on these pet animals is also much more. These animals cannot survive in high heat, rain, and cold. The cows are also affected more by climate change, and due to this, the quantity of milk is decreasing. Whereas sometimes due to climate change, animals are dying from different types of diseases. Because pet animals are not able to tolerate climate change. Due to this the livelihood of the Adivasi community is also getting affected a lot.

### Conclusion

Due to the lack of education in the tribal community, they are suffering in many ways in society. Climate change is also a factor, due to which there is a lot of impact on their livelihood. Their main work is labor work in Tea Garden, but at present, their life is slowly changing. In the Dooars area due to climate change, they are not able to earn that much for their livelihood. That's why they are searching for work by going to small cities around their house. And we know that the lower caste struggled for new work and if they got jobs then we see that the upper or rich people exploited them in different ways. For example, doing more work and getting less pay, being overburdened, etc. Along with that girls are also absorbed. For instance, Denis Giles said in a seminar that, "The nature of exploitation has changed. Even six decades after the country attaining Independence, the living conditions of Adivasis have not changed," and he also said, "It is with pain I say that the tribal women are being sexually assaulted and young girls are being exploited. The tribals are faced with the problem of eviction and have lost their identity. My appeal to the society is to respect the tribal communities and not to look down upon them". That also applies to the Dooars area Adivasi community. The tribal community is very backward in society as compared to other communities. And if we do not pay much attention to communities like these, then there will be a lot of hindrances in India's progress. And we did not deny that the dark shadow of climate change is an important factor behind all this.

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