

epiSTEME 9 – Submission No. - 12

# Climate Change in Environmental education in Middle-schools over West Bengal: status and perception evaluation

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- Middle school syllabus
- West Bengal Board
- West Bengal is the most climate-vulnerable state
- Six eco-regions with different impact

Biodiversity, waste and recycling, Man-made flood, Biomagnification of pesticides.

Climate change cause, impact, extreme events, water cycle, deforestation, heat island, biodiversity loss.

Over-population, over usage of fossil fuel, renewable energy

Class VI

Class VII

Class VIII

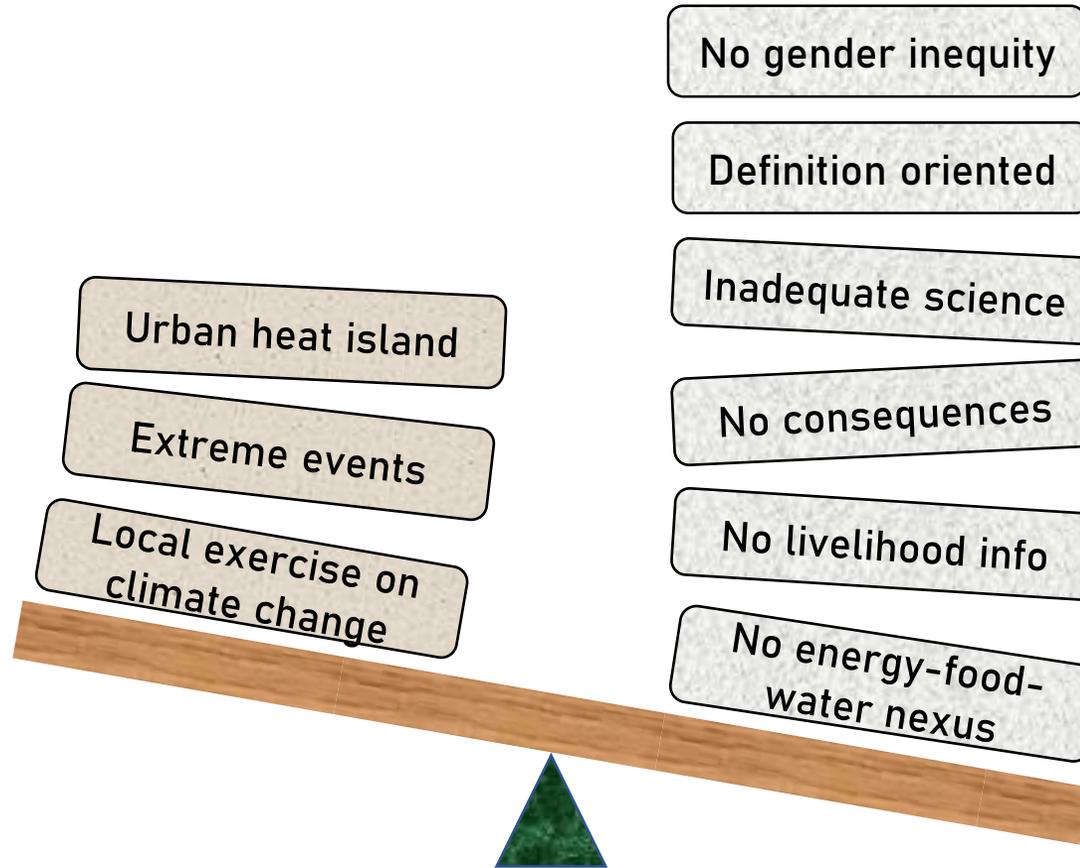
*Surprisingly, climate change was introduced in class VII and the complexity of the issue was not discussed at all in class VIII. The discontinuation of climate change education in the higher class can be crucial as this might lead to developing a belief on climate change as a “less important topic”.*

What is in the syllabus?

Observation

*The relation between green house gas and global temperature rise is not at all describe. It seems global warming and green-house gas emissions are two separate thing.*

*Local impact of climate change are not discussed. The impact of climate change has been restricted to polar bear habitat, ice-melting in poles.*



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126 workshops  
20 livelihood sessions  
2 citizen science  
1 app



What?

First Bengali communication platform on climate change

Why?

Climate vulnerable people does not understand English



Flood, extreme rain  
and temperature

Drought, extreme  
temperature

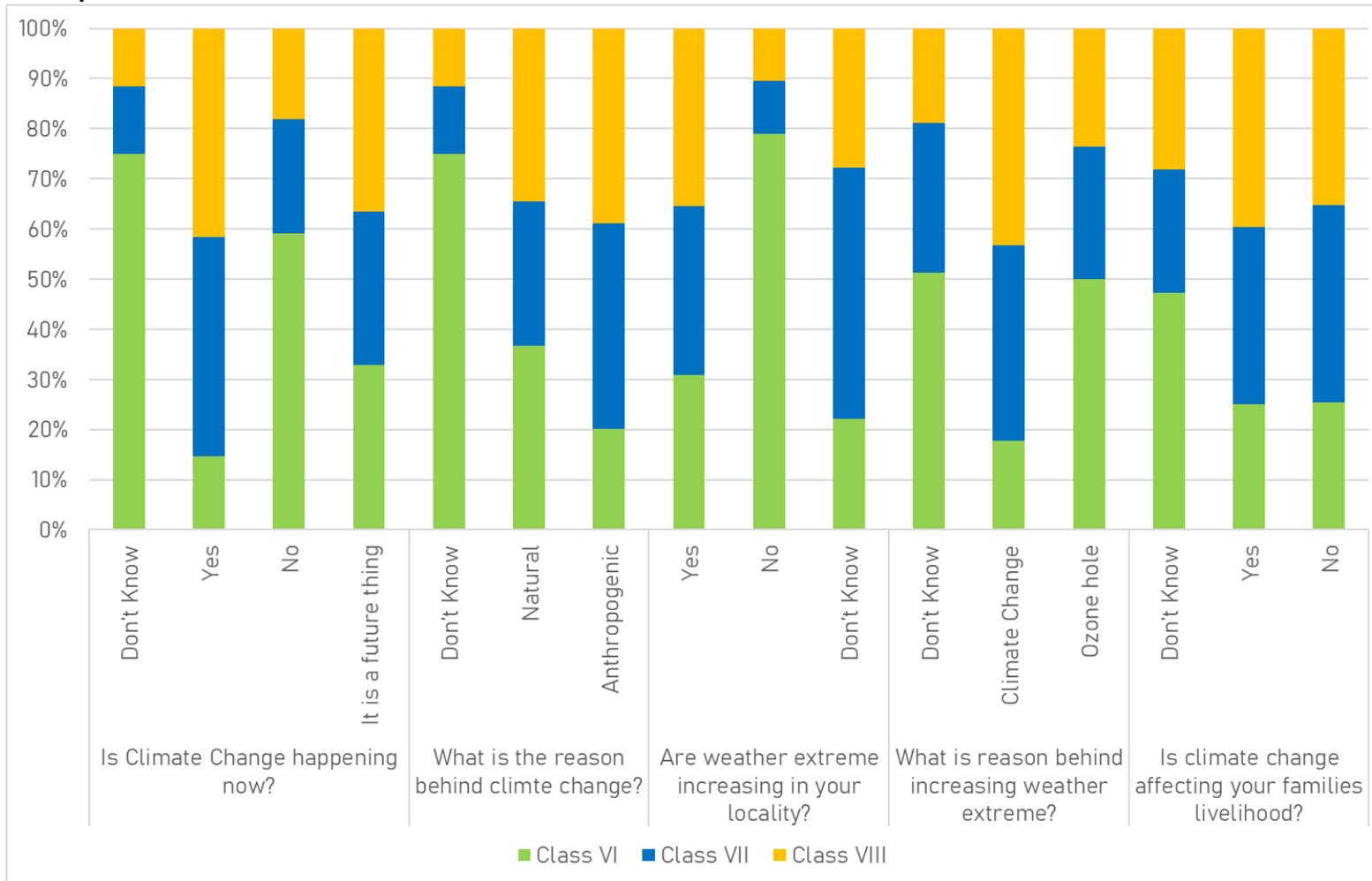
Cyclone, flood and  
extreme rain

Middle school student survey (n = 181)  
Sundarbans, Midnapur and Murshidabad  
Rural school – agrarian community (79%)  
Monthly income (mode) - <10,000 INR

Student perception on climate change

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A significant proportion (25-39%) of students believe climate change is a distant phenomenon that will occur in the future.

A substantial proportion of students of class VII (26%) and VIII (31%) believe in the natural causes of climate change.

The connection between climate change and the livelihood of families is not at all precepted well

What is in the syllabus?

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Questionnaire is modified after the primary survey.

*“Is cyclones affecting their livelihood by salt water inundation in cropland and ponds?”*

*“Do you feel stronger heatwaves in summer leads to water crisis and crop failure?”*

*“Is flooding reducing earning of your family and damage your field and home?”*

*“This year, wells became dry in mid-summer and we went to collect water from the jhoras. But when the jhoras got dried, we had to walk miles before we get water for home. Fields became dry and my father goes to city every day for finding works.”*



*“During Amphan, we lost three cattles and eight ducks. We took shelter in the cyclone center. When we came to our home, we find it damaged. We could not able to move our livestock and most of them died. The land is now filled with salt water and can't be used for agriculture. My father and brothers are now at Kolkata working on a daily wage.”*

Irrespective of classes, the narrative from students are very advance as they talk about climate refugee, vulnerability and livelihood damage.

The local impacts of climate change are not discussed in their text books and therefore it is difficult for them to draw the connection between green house gas emission and crop failure.