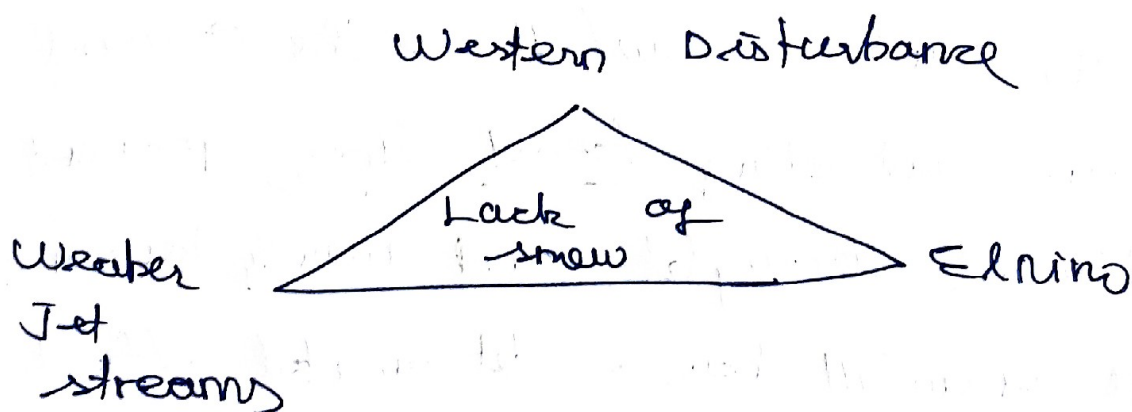


Northern states like HP are witnessing dry winters rather than snowfall. Explain climatic factors responsible for lack of snowfall.

The Himalayan states of Himachal Pradesh and Jammu and Kashmir are devoid of snow this year. This is due to reduced snow fall in the region.

Reasons for lack of snowfall

Himachal Pradesh has witnessed driest January since 1901 with 99.7% shortfall in January rain. The main reasons behind lack of snow fall is low moisture despite the temperature being low of about 5-8°C than the normal.

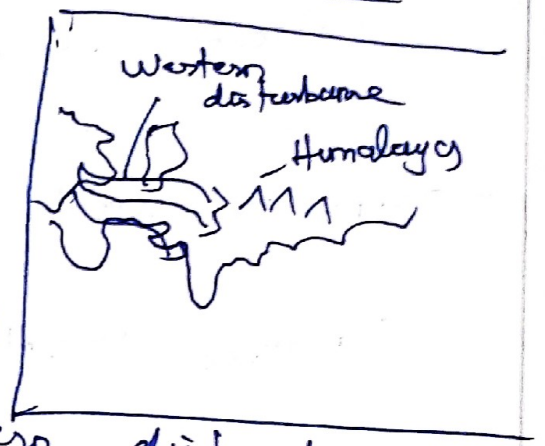


① Western Disturbance - These are extra tropical cyclones that originate in the Mediterranean regions and travel eastwards.

The non-monsoon cyclones are essential for rain in north India and snowfall.

This year saw only two western disturbances.

② Jet streams - These are the high speed winds that blow around 12 km/s. They



are the carriers of western disturbances. Due to climate change, jet streams started to ~~shift~~ shift ~~of~~ northwards.

③ El Niño - El Niño though negatively affects the Indian monsoon, its effect on snowfall needs study.

The winter snowfall is the crucial factor in controlling forest fires, prevent agricultural drought and mainly tourism. Lack of snowfall has a detrimental effect on the economy and biodiversity of the hills.