Reduced Flow in the Victoria Falls

What is the issue?

- The Victoria Falls are one of southern Africa's biggest tourist attractions.
- Now, a worst drought has reduced its flow to a trickle triggering fears that climate change might destroy a major tourist attraction such as this.

What is happening?

- The Victoria Falls located in Zambia and Zimbabwe, is of 1.7 km width and roughly 108 m height.
- The falls fed by the Zambezi River, define the boundary between Zambia and Zimbabwe in southern Africa.
- The falls are also referred to as "The Smoke that Thunders" and is a UNESCO World Heritage Site.
- Its flow has been reduced to a trickle due to the severe droughts in the southern African region since October 2018.
- One of the worst droughts of the century has reduced the fall's flow to a trickle triggering fears that climate change might destroy it.

What are the possible reasons for the falls' significant dry up?

- Typically, the months of November and December are the driest times for the region.
- In November 2019, the average flow over the falls was down by 50%
- In the last two months, over 200 elephants have died in Zimbabwe's conservation zones due to the severe drought conditions.
- Now, many elephants and lions will be relocated by the country's wildlife agency to save them from the drought.
- **UN report** - Because of the drought conditions in Zimbabwe, the majority of the population was food insecure.
- **IPCC report** - The southern African region is particularly vulnerable to climate change, with temperatures rising faster at over 2° Celsius as compared to global warming at 1.5° C.
- The report also projects a precipitation decrease of about 10-20%, coupled with longer dry spells over Namibia, Botswana, northern Zimbabwe and southern Zambia.
- Furthermore, it adds that the projected reductions in stream flow of 5-10% in

the Zambezi River basin have been associated with increased evaporation and transpiration rates.

- These are the result of a rise in temperature with issues for hydroelectric power across the region of southern Africa.
- While the droughts are affecting both people and wildlife in Zimbabwe, the effects of the drought are being felt on both sides of the border of Victoria Falls.
- Even so, some climate scientists are advising caution in categorically putting the blame on climate change.

Were there any previous instances of slow flow?

- According to the Zambezi River Authority (ZRA), at the Victoria Falls
    1. The **maximum flow** was recorded during the construction of the Kariba Dam in 1958, at 10,000 cubic metres per second (cumecs)
    2. The **lowest flow** was during the 1995-1996 season, when the annual mean flow was at 390 cumecs.
- The long term mean annual flow at Victoria Falls is over 1,100 cumecs.
- **Recent ZRA data** - The flows have increased from 207 cumecs on 26th November to 227 cumecs on 2nd December, 2019.
- Last year on the same date the flow was at 220 cumecs.

What is the relationship between Victoria Falls and Tourism?

- Being one of the biggest tourist attractions in southern Africa, tourism at Victoria Falls brings in revenue for both Zambia and Zimbabwe.
- The falls can be accessed through both countries.
- As 75% of the falls are visible from Zimbabwe, only 25% of the falls are visible from Zambia, more tourists access it through Zimbabwe.
- **Zimbabwe** - According to the Zimbabwe Tourism Authority, 62% of those who visited national parks, visited the rainforest (Victoria Falls) and the Zambezi National Park.
- While other national parks in the country are mostly visited by domestic tourists, over 71% of the arrivals at Victoria Falls were foreigners.
- The revenue from tourism increased from $917 million to $1.386 billion, out of which $1.051 billion came from foreign arrivals.
- Significantly, the opening of the Victoria Falls International Terminal in 2015, improved connectivity to the area.
- **Zambia** - The tourist arrivals at the Zambian side of the falls recorded a drop between 2014-15, according to Zambia's Tourism and Art Ministry.
- The international tourist arrivals fell by over 34.7%.

Source: The Indian Express

