

**QNO:-**

Pakistan is located in a semi arid regions of the world, hence is more prone to climate change effects. Explain what adaptation measures will be feasible in the situations of worst climate change in regions like Pakistan? 2019.

**ANS:-**

**① Introduction**

There is no denying that fact that, Pakistan contributes less than 2% of the global greenhouse <sup>gases</sup> emissions (GHGs), however it is in the list of top 10 ~~off~~ global warming sensitive nations. There are multiple reasons for that and one of them is its geographical location. It makes Pakistan vulnerable due to its semi-arid nature. That intensifies the effects of climate change in these regions. Such as harsh weathers and excessive floods. However

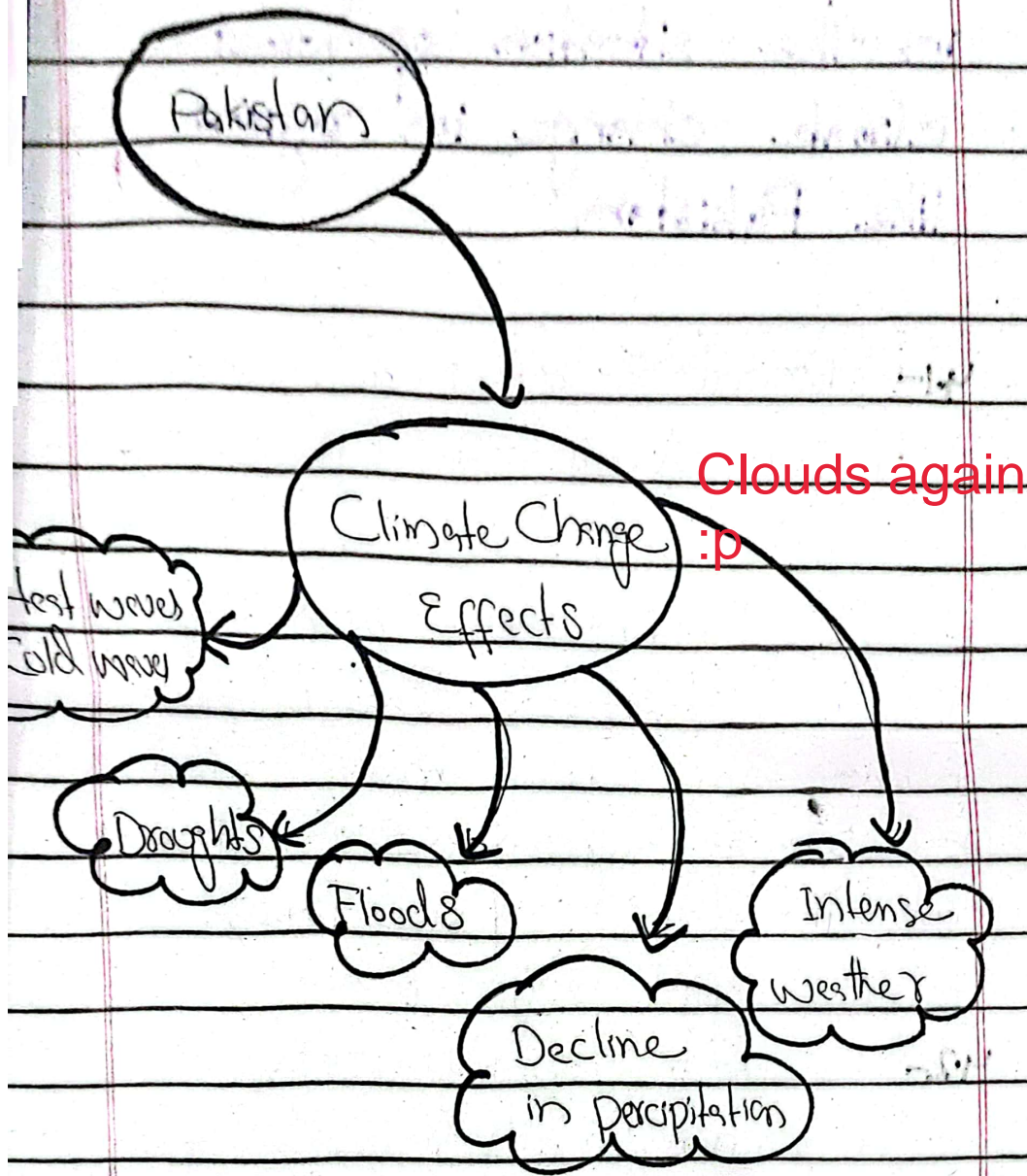
There are way out to cope with such situations. Such as, inclusive policy, sustainable infrastructure, rain water harvesting, seed banking and many more.

### ② Understanding the term Semi-Arid Region

According to Merriam dictionary, it is a region where there the  $P$  is precipitation ratio falls between 200-500 mm. The climate of that region remains hot in summer.

### ③ Climate Change Effects in Pakistan due to its geographical location - A flow chart

There are several impacts of climate change in Pakistan due to its semi-arid nature, and some of them are given below -



According to PDMA, Pakistan has been facing the worst impacts of climate change since from 2010's massive flood. The impacts with passing years are increasing.

## ④ Adaptation measures feasible in the situation of worst climate change in regions like Pakistan

41- Formation of an inclusive policy addressing the issue

Pakistan has been missing the essence of inclusive policy making, which is a major problem in solving any issue in the country. Therefore, inclusive policy making is first requirement.

42- Construction of mini-dams for reserving water in the time of extreme droughts

Owing to Pakistan's semi-arid climate, there remains the ~~uncertainty~~ uncertainty of rains or droughts. For that purpose mini-dams are good to some purpose.

43- Rain water harvesting technique along with modern drainage system in a case of cloud burst - or urban flooding

**Highlight imp points**

There are many countries which are using this technique: the European nations (Germany) are found in the list. It will also help Pakistan against impacts.

44- Sustainable Infrastructure: constructing - the sustain infras-structure to deal with harsh weather -

One of best way towards adaptation is sustainable infrastructure. The flood proof, earth quake proof infrastructure will also serve the purpose.

45- Innovation in Agriculture practices - To evade the risk of food insecurity

As, due to semi-arid climate, the risk of food insecurity remains alive. Through, biomimicry agricultural model that risk can be mitigated.

4.6 Seed banking - A way to protect the bio-diversity and risk of food insecurity

Moreover, there are several climate hit nations, such as Latin Americans and African countries are working on seed banking.

4.7 - Awareness in masses about the climate induced catastrophes

This is also an important step towards the adaptation to include the masses. It is only possible through awareness.

48- Pre-disaster risk mitigation and management in order to decrease the risk

Through, pre-disaster risk management many climate induced disasters and their worst effects can be prevented.

49- Collaboration with International Organization for Ecological restoration in the areas of disaster

Owing to climate change's worst impacts on Pakistan the country will face biodiversity loss. For the Ecological restoration the I.N collaboration is important.

4/10- Possible efforts for the rehabilitation of affected through joining hands with international community

More importantly, for the rehabilitation, through loss and damage fund the process can be accelerated for the rehabilitation of affected masses.

### ⑤ Conclusion

To reiterate, there are multiple reasons for the worst climate change effects in Pakistan and its geographical climate is one of them. Through, constructing sustainable infrastructure, sustainable agriculture and prudent policy making the countries like Pakistan can move towards adaptation.

Good

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