Effect of Weather change in Mexico, particularly on the Chapala Lakeside

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Every time I contemplate our planet floating in the cold, barren space, I realize the drastic contrast between the Earth and the surrounding planets: the Earth is covered by a lot of water, it has plenty of clouds and, most important, it embraces abundant life.

In fact, for our planet to exist, a large amount of extremely special conditions had to converge (its distance from the sun, the different gases in its atmosphere, the presence of water, among others). This fact has inspired some researchers like British astronomer Martin Rees to state: "life as we know it depends on a pretty improbable and rather miraculous convergence of physical events."

Among the physical atmospheric conditions that make life possible on our planet, are the CO_2 . It is a natural component of the atmosphere that regulates temperature, making life possible. This happens because CO_2 is capable of absorbing long wave radiations (heat) produced by the Earth and preserving them on its surface, which serve as a "blanket" over the planet.

Nevertheless, human activity has caused the increase of so called "green house" gases. Like CO2, they trap the heat. They are N2O, the cloryde-fluor-carbides and the CH4, which are basically produced by generating electric energy and transport means.

The emission of such gases is increasing drastically. Today, emission of CO2 is twelve times larger that it was in 1900, thus, the green house gases have reached their highest peak in the last 420 000 years. This fact has need revealed to us by the bubbles trapped in the Antarctic ice, that are analyzed once the ice melts,

The temperature increase are causing great unbalance on the planet's weather system, affecting the flora and fauna on all the ecosystems covering the Earth. A great variety of species are being hurt and lots have already gone to extinction, mainly amphibians. On the other hand, the climate changes contribute to the outspread of diseases in places where they had never existed. Such is the case of dengue fever that was bound to occur only at 1200 m. above sea level and it is now affecting cities like Guadalajara.

On regions like Guadalajara and Jalisco state in general, a more erratic rainfall is expected in the future, with more out of season rainfalls and less rainfall during the rainy season. This event, together with higher evaporation rates, will affect all watercourses like the Chapala Lake.

Mexico is a region that proves highly vulnerable to global warming impact. We have two possible answers to the problem: lowering our CO2 emissions, or else, estimating the region's vulnerability to weather change and taking appropriate action to decrease the negative impacts on it, seeking to the people's and the ecosystems' safety and wellbeing.