El Niño Driving us Nuts!

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The phenomenon El Niño and the climatic change are realities for which us Cubans must prepare urgently and take precautions to minimize its effects, says a climate specialist...

This spring feels like summer, the month of May brought a suffocating heat; to despair, even irritating. In June had rained what it was supposed to fall in May with the same heat or worse. High temperatures attempt against the most elementary education rule, because on reaching any place, before the civic "good morning, afternoons or nights", one can only protest: What a heat!

This early in the year the climate is "driving us nuts". In January José Rubiera must have felt a buzzing in his ears, because although there are many more meteorologists in national television, Cubans have a soft spot for him and it’s the first name in the tip of our mouths when speaking, for good or for bad, about the weather forecast.

It turns out that amidst that climatic madness early in the year, I heard a couple of neighbors talking very seriously: "what I don't get is how is possible in a country of this size in the Eastern region the earth shakes from the heat and here in Havana we are drowning with so much water, I’d like Rubiera to explain that, because El Niño is driving us nuts."

Truth, although at first I found it funny the weather concern of the neighbor from Havana, I recognized that for me it was also a crazy development, so I decided to consult an expert. The Master in Sciences and climate specialist Nilian Fernández agreed to comment her points of view with Cubasí. By the way, is no longer a secret that I borrowed the first question.

How is possible in a country of this size in the Eastern region the earth shakes from the heat and here in Havana we are drowning with so much water?

"That is closely related with the anticyclone influence which is weaker in the eastern region of the country.

Therefore the western and even central area are prompt to be rainier, mainly the whole north side of the western and central region, due to the influence of cold fronts that characterize this season. These cold fronts reach the island weakened, hence they have little influence, neither the characteristics of abundant rains in some cases or the little rain that accompany the pre-frontal band. Besides it has to do with the characteristics of the territory: the type of soil, the influence of winds which is not the same, the fact that the largest mountains are there… "

Is it possible to foresee how the climate will behave in the future?

"Yes, there are models for that. To make a model of what could happen with the behavior of variables we use global models that we downsized to a regional scale for each province. In order to do that we first run an analysis on how the climate has behaved since we have meteorological stations in the province, we are talking about seven stations with 50-year-old data some of them. This analysis showed us that there has been variability in the behavior of these indicators. We build a model from there to confirm if the climate will continue changing and what it's expected the climate to be… "

And which was the result?

Overall it’s expected an increase of temperatures, a drop in rains during the rainy season, while there is a tendency to increase rains in dry season, this will be determined by different atmospheric phenomena like for example now that cold fronts has been rainier because of El Niño presence or other events like hurricanes, tropical hurricanes that affect us. In fact some of these phenomena are off season and can cause abundant rains.

And what can we do before this climatic madness that’s looming?

“Our final goal is precisely making the model to prepare the population and the institutions so they take measures while waiting for these scenarios, measures that, of course, will benefit the people and the economy”.

"The first thing to do is to raise awareness on the weather forecasts, not only those of the day, but those given for a few days perhaps a week. There are even studies where it’s forecasted the next month, the following season. If we are aware of this we can get ready for all the changes that take place. But we also have studies on determined places, studies that have taken into account how different types of illnesses behave, that is, specific investigations related with the different places."

Are these studies actually taken into account?

"Not always. The different sectors must take measures of adaptation to the climatic change for which they have to take into consideration the threat, vulnerability and risk studies carried out in the territories, in Matanzas, for example, we have already done these studies on forest fires, intense rains, drought, strong winds, sea penetrations. Taking meteorological events as a starting point the municipalities have, for each area, how it can be affected and in the entire country is carried out this type of studies which are constantly updated, but the heads of the different institutions not always keep them in mind. "

Every three or four years since early in the XX Century and more often since the 90’s, El Niño has tormented the climate of our island. Several Cuban researchers have worked on the effect of what is known as ENSO: "El Niño – Southern Oscillation", which is recognized as the main factor creating the climatic variability so far. The book Impact of the climatic change and measures of adaptation in Cuba whose group of authors explains:

"A very important part of the yearly variability of climatic elements in Cuba is explained by the presence of this event (…) it has been proven that the ENSO causes important changes in a good number of climatic variables, particularly on the winter precipitations and the tropical cyclonal activity… "