

A tool against climate change...and hurricanes

David Viñuales

One-degree more or less in London does not mean anything; a change on the rain pattern in New York has an impact on the use of the umbrellas and the raincoats. However, these changes, that can be insignificant in towns, have a dramatic impact on the life of farmers around the world. It is called *climate change*.

The indigenous communities living around the rivers Bocay and Coco, in Nicaragua, know only too well, what such changes mean for them. If the rain fails to arrive when it is expected, if they have unexpected animal visits or if the river does not have water enough - all of those things have a direct impact in their lives.

'The summer now is winter. April used to be summer, but it rained all month. Now, in May (winter) it doesn't rain. We listen to the thunder, we see the lightning that should let us know the rain is coming, but it does not arrive. Because of this climate change, we are suffering a decrease in our farm production', said Howard Fernández, a Miskitu farmer living in San Andrés de Bocay community.

An Early Warning System, being put in place by a joint effort of Acción Médica Cristiana, (CMA), the local organization Centro Humboldt, The Indigenous Traditional Authorities and Oxfam International, is contributing to measuring rainfall and to providing data on variations in river level in real time. The data is transmitted by radio to the national weather and climate institute INETER (Instituto Nicaragüense de Estudios Territoriales) in order to mitigate or prevent the direct consequences of a hurricane and the subsequent flooding.

During Hurricane Felix (August 2007), the learning was challenged by the situation, but it showed that the system works. The Wiwinak community where the Early Warning Systems is installed had time to evacuate, with coordination between the authorities and themselves. This wasn't the first time. In some of the communities they had experience when hurricane Stan (October 2005) hit the area, and they were able to evacuate, like the population of Wiwinak.

The indigenous communities have a very close relationship with nature: their view of the world is linked to the signs that they learned to interpret. But these signs are changing. The older generation told their children that white cranes, flowering avocado plants, silver fish and rapid flashes of lightning meant that the rain is coming. Not anymore.

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'All my life the earth has told me when the rain is coming. I don't understand what is happening', said Marciano Washington, a farmer on the bank of Coco River. He used to harvest sixty bags of rice per hectare; now, he harvests seven. 'We can't depend on nature anymore. We don't know when to plant our crops'.

To the traditional authorities, the new system brings hope. Once they learn the changing data of the 'new' climate, the Early Warning System will help them to match the new patterns of rain, temperature and natural behavior with external signs, similar to those they learnt from their ancestors, in order to understand better what is happening and how they can interact with nature.

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