

## COP27 Viewpoint by Rattan Lal

Last month, Egypt welcomed the world to the coastal city of Sharm El-Sheik for the 27th United Nations Climate Change conference, COP27, from November 6th to the 22nd of 2022. The first COP event was hosted in Berlin in 1995 and has been held annually ever since, apart from 2020's cancellation due to COVID. This year's event was attended by several heads of state, including President Biden of the U.S., as well as diplomats, private sector representatives, NGOs, journalist, and additional delegates of the United Nations Framework Convention on Climate Change. I was very grateful to attend at the invitation of the Inter-American Institute for Cooperation on Agriculture (IICA).

While delegates negotiate collective action that can be taken within their countries, a wide range of events is simultaneously hosted in both the conference's Blue Zone, where government officials meet, and Green Zone, dedicated to representatives from NGOs and the private sector. COP27 included an Agricultural Day on November 12th, specifically devoted to agricultural and food-related issues. This is an important outcome of COP27 which focused on making agriculture (crops, livestock, and forestry) a solution for adaptation and mitigation of atmospheric climate change.

Expectedly, the size of COP's attendance has increased progressively since 1995, with this year's event estimated at 45,000 participants. This size has its own merits and limitations. Because numerous events of a similar thematic focus are occurring simultaneously over large distances and within different venues, it is a challenge to attend and participate in all the activities aligned to one's interest.

Notable outcomes of the 27 COPs include the Kyoto Treaty, which required the developed countries (37 industrialized countries plus the European community) to reduce emissions by 5% below the 1990 level between 2008 and 2012. However, developing countries (including China and India) were not required to cut emissions. Consequently, the U.S. did not agree to implement the reduction plan and the Kyoto Treaty failed. In 2015, COP21 in Paris proposed all nations reduce



*Dr. Rattan Lal; Lloyd Day, subdirector general, IICA; and Eric Mittenthal, chief strategy officer, North American Meat Institute*

emissions so that the atmospheric warming does not exceed 2 degrees Celsius (preferably 1.5 degrees Celsius) above the pre-industrial level (circa 1750). The Paris Accord also implemented the so called “4 per 1000” initiative, sequestering organic carbon in world soils at the annual rate of 4-per-thousand (0.4%) to 40cm depth. Innovative and useful as this soil-based solution is, it has not yet been implemented because of the lack of funding to support land managers. There have been other initiatives (i.e., Adaptation of African Agriculture, AAA, at COP21; the Platform of Latin American and Caribbean Agriculture Climate Action, PLACA, at COP25; and the Food and Agriculture for Sustainable Transitions Initiative, FAST, at COP27) but the implementation of these noble and innovative ideas has become a serious problem.

### **Humanity is running out of time.**

While the annual COP events are important to enhancing awareness about the problem, the voluntary implementation of the plans has not occurred. It is time to consider compulsory implementation of schemes to both reduce emissions and sequester emission. By adopting land-based solutions and developing non-carbon fuel sources, global warming can still be limited to below 2 degrees Celsius.