

Dr. Veerabhadran Ramanathan

Atmospheric Scientist Believes Religion and Compassion Across Borders are Keys to Stopping Global Warming

Dr. Veerabhadran Ramanathan and Pope Francis have a brief exchange after a four-day workshop on environmental stewardship and human justice.



Photograph courtesy of the Pontifical Academy of Sciences

Dr. Veerabhadran Ramanathan, known simply as “Ram,” discovered the greenhouse effect of halocarbons in 1975. Along with climatologist Roland Madden, he predicted in 1980 that global warming would be detectable by the year 2000. He is a distinguished professor at the University of California at San Diego’s Scripps Institution of Oceanography, and oversees a University of California initiative for all 10 campuses to become carbon neutral by 2025. His most recent proposal — that the mitigation of short-lived climate pollutants such as black carbon, methane, ozone and hydrofluorocarbons (HFCs) will slow global warming significantly this century — has been adopted by the United Nations and 30 countries. Dr. Ramanathan believes that while science and technology are needed to solve global warming, the underlying solution is to change people’s attitudes toward nature, and to make this happen a religious leader is required. This belief led him to serve on Pope Francis’ Council for the Pontifical Academy of Sciences. *Tokyo Journal* Executive Editor Anthony Al-Jamie spoke to Dr. Ramanathan about climate change and his part in the Dalai Lama’s Global Compassion Summit’s panel discussion on “The Global Impact of Climate Change.”

TJ: Has His Holiness the Dalai Lama done much for the environment?

RAMANATHAN: Oh, a tremendous amount — in his books, in his speeches. He’s one of the global leaders in creating awareness about the environment and climate change. I consider him on all fronts the model leader for the world.

TJ: What was the most important thing you took away from meeting the Dalai Lama?

RAMANATHAN: One is that to solve the climate change problem we need compassion across borders. I have shown that 60% of emissions come from the wealthiest one billion people. When you look at the poorest three billion, their role with warming pollution is very negligible ... Things like [droughts and floods] could wipe out this three billion population because they are rural subsistence farmers. It doesn’t take too much to eliminate them. A one-year drought is enough. They are innocent bystanders, and by going on a plane, driving polluting cars, we are sending millions of poor people into desperation. They become migrant. We need to have compassion across borders. As a scientist, that really appealed to me. The second thing [His Holiness] talked about was ... this is a solvable problem, and as a scientist I agree with that. We have the science, the knowledge and the technology to solve the problem, but we have to do it now, not 50

years from now. So it was quite heartwarming for me to hear it coming from someone whom millions listen to.

TJ: How can we make an impact on global warming?

RAMANATHAN: We need a bottom-up solution coming from the people. I would call what His Holiness the Dalai Lama is doing a force multiplier — there is already awareness, but he takes it to the highest stage and gets more people involved ... The situation has evolved now to a very highly technological stage. That’s going to continue and has to continue. But what has happened is that our technologies relying on fossil fuels — coal, oil and gas — have become outdated and we need to switch to cleaner technology. We have sunlight, wind power and other fuels which are less polluting.

TJ: How about nuclear?

RAMANATHAN: Nuclear is climate neutral. It doesn’t have any direct effect on climate change, but the problem with nuclear is it is shrouded in so many issues, particularly getting rid of waste and operating plants.

TJ: Are you comfortable with nuclear fuel?

RAMANATHAN: I am definitely not. I’m not an expert on this, but from case studies — what happened to Japan and [San Onofre, California], and Germany deciding not to go nuclear ... we have to respect these

advanced societies like Japan and Germany. We have solar — the sun shines on every country. I don’t think of [solar] as safer, I think of it as the eventual solution. When we run out of everything, the sun will still be there. Ultimately, we have to go to the sun, so why don’t we do it now?

TJ: Are hybrid cars making a big impact on the environment?

RAMANATHAN: Definitely, but hybrids are still using fossil fuels. Over the next 20 to 25 years to prevent catastrophic dangers, we have to go completely renewable. I drive an electric car, which is cheaper than all the other cars, and I have solar [panels] on my rooftop, so I charge it from my rooftop.

TJ: What do you say to people who say that global warming doesn’t exist?

RAMANATHAN: People say Darwin’s evolution doesn’t exist too, and I don’t want to criticize them either. These are very complicated concepts. Something which you can’t see comes out of the tailpipe of your car, and I’m saying it’s causing floods, melting glaciers ... it’s very difficult to comprehend that, so one has to invest time to understand. It’s sad that climate change has become political in America. It’s a scientific issue, not a Republican or Democratic issue. But it has become political and that’s a fact that we have to live with. *tj*