



Dr. Mostafa Tolba

Architect of the Montreal Protocol, IPCC and Biodiversity Convention

This week, another remarkable leader of the global environmental movement leaves us: Dr. Mostafa Tolba led the United Nations Environment Programme (UNEP) for almost 20 years, and made possible the current global environmental agenda based on science, consensus by treaty and financial support. He passed away on March 28, 2016.

Tolba graduated with a Ph.D. from the Imperial College London, and published over 100 peer-reviewed papers before becoming a senior civil servant in Egypt and then Egypt's Minister of Science. It was in that capacity that Tolba headed the Egyptian delegation to the historic 1972 UN Stockholm Conference on the Human Environment.

Following Stockholm, he became the first Deputy Executive Director of the newly established UNEP under Maurice Strong. UNEP was the first UN agency ever to be headquartered in a developing country. Indeed, from the outset of his international leadership, Tolba brought the perspectives of developing countries to the centre of the global environmental agenda.¹ Tolba recalled that "since UNEP's inception, our consistent plan has been '*development without destruction.*' ... Sustainable, rational use of living resources is economic common sense."²

¹ At the official opening of UNEP in Nairobi, Kenyan President Jomo Kenyatta warned that "poverty, disease and decay are recognized pollutants today, and pose grave dangers to man's survival on this earth" (see: <http://www.unep.org/pdf/40thbook.pdf>)

² Tolba, M. (1982). Tribute to Mostafa Tolba, *The Environmentalist*, 2(1)



Less than two years later, Tolba was elected UNEP Executive Director. Today, the idea of international environmental action is commonplace. Four decades ago, bringing countries together to protect the global commons was largely untested. UNEP initiated a number of innovative actions to spur global action, including creating a durable scientific foundation for action, finding shared values for action such as the Mediterranean Action Plan and the Regional Seas Programme, pooling scarce resources to help countries assess and manage chemicals, and using satellite remote sensing data to provide early warnings of environmental pressures.

I was enormously lucky to work directly for Dr. Tolba in the late 1980s until he retired in 1992. He was a demanding and yet uniquely gifted leader: in the three years I worked in his office, he successfully steered the negotiations of the Basel Convention on transboundary hazardous waste, brought new scientific evidence to toughen the Montreal Protocol, co-founded both the Intergovernmental Panel on Climate Change (IPCC) and the Global Environment Facility, supported the creation of what is now UNEP's Financial Initiative, and led the work towards the Convention on Biodiversity. He once told me that he would speak as a scientist to ministers and as a minister to scientists; since neither understood the other's language, he was able to spur action.

Adnan Amin, the Director General of the International Renewable Energy Agency (IRENA) and former UNEP professional under Tolba, has shared that “rarely do we see the conjunction of sound scientific credentials, astute political and diplomatic judgement and absolute belief and commitment to an ideal in an individual in public institutions. These qualities were what enabled Mostafa Tolba to create a vibrant institution in UNEP that still runs today on the foundations of international environmental law and norms that he forged.”

Tolba's most important legacy is the Montreal Protocol. In the late 1970s and early 1980s, there were early signs that the stratospheric ozone layer was thinning, and while the science was then inconclusive, evidence pointed to chlorofluorocarbons (CFCs), widely used in aerosol sprays and other uses. Early on, Tolba committed UNEP to push for urgent action. In 1982, Tolba pleaded with governments to act together, noting that “all the most reliable scientific evidence points to the fact that the Earth's protective ozone layer has been, is being, and more importantly, will continue to be depleted by chlorofluorocarbons.... The costs of continued [CFC] pollution are not primarily ours to bear: If scientific observations over the next few years turn the theory of ozone depletion into unchallengeable fact, then the hazard of increased ultra-violet light exposure due to ozone depletion is a legacy we will pass on to future generations.”³

It is hard to overstate the historic importance of the Montreal Protocol. It has saved millions of lives from skin cancer and other health impacts. The Montreal Protocol was the first of its kind in many ways, from creating a stand-alone fund to assist developing countries, to creating a clear scientific review process to align the level of action to our changing understanding of risk. It serves as the model for subsequent agreements, including Paris. Durwood Zaelke, President of the Institute for Governance and Sustainable Development, says of Tolba:

He was a wise leader who more than anyone is responsible for building the world's most successful environmental treaty, the Montreal Protocol, which put the stratospheric ozone layer on the path to recovery mid-century and solved the first great threat to the global atmosphere.

He liked to say that the Montreal Protocol was a “start and strengthen treaty,” where the parties started modestly, learned how to phase out the damaging chemicals, and quickly gained the confidence they needed to do more. For the Montreal Protocol, this meant building a treaty regime that was considered fair by all the UN members—the only treaty to ever attract universal membership—and that was amended and adjusted throughout its history, getting stronger and stronger each year.

³ Johnson, S. (2012). *UNEP: The first 40 years: A narrative*. Retrieved from <http://www.unep.org/pdf/40thbook.pdf>



Years later, Tolba reflected that the Montreal Protocol was “the first truly global environmental treaty, and moreover it dealt with an issue still shrouded in scientific uncertainties, one that posed a threat, not immediately, but in the future, one that potentially affected everyone on earth today, and far into the future.”⁴

The Montreal Protocol became a kind of gold standard for subsequent international environmental treaties, and served as a model to help catalyze international action to tackle climate change. UNEP under Tolba, together with the World Meteorological Organization (WMO), established the IPCC. The first IPCC chair, Bert Bolin, recalls that Tolba, “a former professor of biology at Cairo University, was anxious that emphasis should not only be on the physical aspects of climate change but that attention should be drawn to the role of the global ecosystems.”

In 1990, at a major climate conference in Geneva, Tolba reminded governments that in “agreeing on the Montreal Protocol, the international community showed it could reach consensus on difficult actions if the threat was great enough. Negotiations on the Montreal Protocol began with fewer facts to back up the possibility of environmental disaster than we now know about global warming.”

Tolba doggedly repeated a set of core principles throughout his career: the importance of science coupled with the importance of precautionary action in the face of uncertainty; ensuring developing country perspectives were at the centre of collective action; and delivering concrete, time-bound and measurable actions backed by financial support. Most of all, he reminded us that action is needed today or future generations will face the consequences of global ecological degradation. Mark Halle, IISD Executive Director for Europe and Vice President of Strategy, worked at UNEP in the 1970s. He writes:

Dr. Tolba had a vision and pursued it doggedly. The fundamental international legal infrastructure for the environment was built during his tenure in UNEP, and he was very clearly the architect. His legacy is magnificent and persists to this day. There are very few building blocks of international environmental cooperation that do not carry his fingerprints.

William Mansfield, former Deputy Executive Director of UNEP remembers that Tolba was able to, “combine scientific and governmental experience needed to really understand environmental and developmental issues as well as the relentless drive to get things done. And, he did.”

Donald Kanairu, Tolba’s former chief of staff and head of the UNEP Division of Environmental Law and Conventions, remembered Dr. Tolba this way:

Whether in office or out of office, Tolba towered like a colossus in global environmental endeavors. For over four decades, he was on the undisputed throne of environmental earthly kingdom.

He was truly Boss as we always knew him. As I remember him fondly. I am conscious that in any environmental discussion or negotiation, there was no closure until he had made his contribution; he was the last word on environmental matters. We will dearly miss him. We remain eternally grateful that he tutored us, but the family, friends and ourselves remain the poorer without him.

May he Rest in Eternal Peace.

Scott Vaughan, IISD President and CEO
March 2016

⁴Ibid.

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