

Systems Thinking Leading to Effective Global Leadership for the Environment

Julia Marton-Lefèvre

The 2024 Baker Institute International Symposium, Toward Environmental Justice: Transition to a Sustainable Future, October 9 and 10, 2024

Julia Marton-Lefèvre is Chair of the Board of Trustees of the Alliance of Biodiversity International and the International Center for Tropical Agriculture.

Let me start by defining some of the terms I use: system thinking and systems leadership. Many people I work with don't know what these terms mean. System thinking is how we understand the complexity of the world, its people, its cultures, and its environment. You've heard about this complexity at this symposium, we all know that we need to understand it, but we need tools to do so. That's what I want to cover here.

The basic message is that we need to understand the whole rather than issues in separate silos. It sounds to that Juniata College students are already being multi-disciplinary. Let me tell you, very few people are. As an example of systems, you know the Dewey Decimal System, the telephone system, the solar system, the weather system—which is changing constantly. System leadership starts with system thinking, which is the ability to connect the dots. We all know that we must do that, but it's more difficult than it has been, and not everybody comes to this college. Believe me, I am a global citizen, and very few people know system thinking.

Do you remember, for example, the criticism Elon Musk faced when he announced that Tesla would take payments in Bitcoins? He had not joined the dots between the energy-intensive nature of mining Bitcoin and what he wants to do with Tesla, which is to make it the most environmentally friendly vehicle. So, very few people know how to connect the dots. In system thinking, the idea is to pinpoint what will have the biggest impact. One example is your diet; you must think about where the food comes from and how it has been farmed before you make a decision. It's not easy, and it takes a lot of time, but I think we're getting much better at this.

To do this properly, we should each become what I call global citizens. You don't have to travel as much as I have (I have a very guilty carbon footprint). But what does this mean? You can be a global citizen wherever you are. We should each strive to become global citizens and try to understand each

other locally and globally, in different cultures, and in other languages. We need to figure out how eight billion human beings can live in peace and security and take the trouble to talk to each other.

Putting system thinking together with global thinking could lead to systems leadership. We're missing that everywhere, not only the systems part but also the leadership part. You are probably familiar with the old fable from India where six blind men touch different parts of an elephant (such as its tail, leg, and tusk) and each concludes that the entirety of the elephant is like the part he touched (an elephant is like a rope, a tree, or a spear). I will use an elephant as a metaphor. When we look at only one part of the system, we think (the larger) elephant is just a long thing like its tail. This is our problem everywhere. Of course, you all know about elephants, but this is to illustrate something we tend to do. Looking at one part is easier than looking at the whole thing.

I've had the privilege of becoming a global citizen, which has helped in my journey toward global and hopefully, systems leadership skills that I hope I've learned and am still learning. I was born in a small, central European country called Hungary with an impossible language and, right now, an impossible government. My parents had to leave their country, which very few people want to do because of political reasons. They were imprisoned, but luckily, they got out and we came to the US. It was, of course, easier to do so having parents who were very, very educated, spoke perfect English, and could make important contributions to this country. Many immigrants do that.

My global journey first took me to Thailand, where I was in the Peace Corps. That was an experience that changed my life. Other than the title, which contains the word "peace," we never spoke about peace in our peacebuilding or conflict resolutions, which is too bad. But it was clear to me that understanding another culture and living in those cultures (I was immersed in Thailand, and I speak Thai) is very, very important.

The fact that privileged young Americans were expected to live just like their local colleagues was also part of an experience of equity in real life. Believe me, I was personally never unhappy living like my neighbors, without air conditioning or a refrigerator, with very little electricity, no telephone, and so on—without the kind of comforts we take for granted in our world. Maybe it was my difficult childhood, having to leave one country and move to another, but I had no problem with living this way in Thailand. Many of my colleagues did. It wasn't easy to sleep in 120-degree temperatures.

By my early twenties, I started to understand the complexity of the world and its inequalities. I had a strong desire to contribute and change things. After further studies, I accepted, as a real idealist, my first job at the United Nations. I worked for a new program in environmental education, which many schools are doing now, but it was new back in 1974. I was one of the few people who had training in

environmental policy and education. That job took me to France, where I have spent most of my life, but I go in and out of that world.

I found the United Nations way too bureaucratic and politicized. That's still true, and we need to help it. Maybe some of you can take over. But one of the nicest things about living in France and moving around the world is my ability to take my sons and grandsons to see the world. I took my two older grandsons to Africa, which has already changed their lives. I think the journey to systems leadership requires curiosity, the desire to learn about other cultures, languages, and disciplines, and, of course, communication skills to reach out to others, even if they are from a different culture than yours.

My first international job after the United Nations took me to a non-governmental organization that was set up in the nineteenth century. It was called the International Council for Scientific Unions (ICSU), and with all the academies of the world, had a mission to ensure scientific collaboration for the benefit of humanity. Who could resist such a mission? I am mission driven, so if I believe in something, I'm willing to work for it.

After that, I accepted the challenge of heading a program funded by the Rockefeller Foundation called Leadership for Environment and Development (LEAD). The program had a systems idea in its foundation. It looked for mid-career people from different disciplines (academia, NGOs, government, businesspeople who don't usually meet) from large developing countries who showed leadership potential. Then, they gave them training in leadership skills and sustainability challenges. The training focused on systems thinking. I could tell you many stories about thousands of LEAD fellows around the world. They are all doing amazing things, and many of them say this training helped them. I'll just tell you about one of them: a very nice scientist, a physicist who worked on climate issues, was one of our fellows. She became Mexico's first woman president last week: Claudia Sheinbaum. I have a lot of stories like that.

The next wonderful opportunity took me to the University for Peace, established by a UN resolution in 1980 in Costa Rica, a country that gave up, very wisely, its army and focused on the well-being of its people instead. Most people there are literate, I think 99.9%, and they have clean water. And they take care of their fragile nature. I was very surprised to be offered the position of Rector of the University for Peace. Having been very much part of the sustainable development community, I didn't know much about, and we didn't talk about, the peace and security challenges we have. For example, when we finally established a well with clean water outside a village, we thought that was it. We never thought about the safety of the women going to get the water and what might happen to them. I realized I needed to accept the offer. I learned a great deal at UPEACE. I still have strong memories of working

with Dr. Amr Abdalla on solving many problems. It was an amazing community with students from all over the world; it was unforgettable. I can tell you many stories about that, too.

One of the most difficult decisions I've had to make in my life—and you all will have difficult decisions too—was when I was offered the position to become Director General of one of the most complicated and largest international organizations, the International Union for Conservation of Nature (IUCN). It's complicated because it's the only organization that involves governments and NGOs—thousands of them—in the same organization. It's a brave design, and not many people dare to take the job, but I stayed longer than anybody else before me. Making that decision was difficult. I had a very moving conversation with the then-Secretary General of the United Nations, Kofi Annan. I told him I hadn't applied and didn't know what to do. He encouraged me to take that job, saying I could make a bigger difference because the organization is so big. He also asked me to stay on the board of the University for Peace. He told me not to forget the link between the peace and security communities and the sustainable development and conservation communities, and that's something I've kept in my heart. But it was a difficult thing to do.

I will talk a little about how things are not organized in a systemic way. Look at the biodiversity agenda, for example. The UN, governmental, and international organizational levels are stuck in their separate organizations. Everybody is still treating things separately everywhere—biodiversity, climate, and so on—as if they have nothing to do with each other. A key moment in the history of international environment and development efforts was the 1992 UN Conference on Environment and Development. I was there. It was a conference with more heads of state than any other conference before or after. They're all men. This conference made some very important decisions.

The scientific community, which I represented when I was the head of the International Council for Scientific Unions, advised the UN conference not to separate the issues. Systems thinking was nowhere. There were three so-called Rio Conventions: the Convention on Climate, the Convention on Biodiversity, and the Convention on Desertification. We advised them to at least put these three conventions in the same city and building if they couldn't merge them. Unfortunately, national egos won. Every country wanted a UN flag in their place, and they hardly ever met. The Intergovernmental Panel on Climate Change (IPCC) was established in 1988; it took the biodiversity community much longer to establish an equivalent body called IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services). They're not in the same city and they don't talk enough.

Scientists have been trying to give advice, but I have to say, scientists also need to walk the walk. IUCN was only natural sciences, and I could never convince my scientific friends to consider the role of human beings. It all depends on us, after all. We must understand how to work together and how we can

contribute. Finally, there was a merger between the natural and social science communities called the International Science Council. But trust-building and mutual respect between these two kinds of science are still missing.

The cartoonist Walt Kelly drew a poster for the first Earth Day, in April 1970, where his famous character Pogo stands beneath of quotation in giant letters, “WE HAVE MET THE ENEMY AND HE IS US” and faces a vast expanse of trash.¹ Still today, this is where our problem lies: it’s us. We have been talking about sustainable development for many years. It again requires systematic collaboration between the economic, social, and environmental sectors, and it’s not easy to get those communities to work together. I trust your generation will do better. After several trials, in 2015 the international community adopted the seventeen Sustainable Development Goals (SDGs). Goal Sixteen promises to achieve peaceful and inclusive societies. Goal One says we’re going to end poverty, which also has to do with equity, but there is a lot more to do there. Just a year after adopting the SDGs, the UN adopted twin resolutions to review the UN’s peacekeeping architecture. The resolutions endorse the importance of inclusivity and advancing and sustaining peace, but there was no reference to what had just happened the year before with the SDGs, which is too bad. This is the invention of IUCN. I am very proud; it happened when I was Director General. It was an effort to bring topics together, the idea that nature can provide solutions to the climate issue, for example.

The discussions about environmental justice started as a social movement against the impacts of pollution. There are some good stories but not enough. In my view, social justice, inclusion, and equity issues are mentioned, but they are very rarely addressed adequately. For instance, the 2015 Paris Agreement on climate change refers to the imperative of a just transition linked to development priorities, but just mentioning it is not enough. I hope we can make it a reality. A couple of examples to illustrate this: The World Trade Organization (WTO), under the leadership of its first amazing African woman, Director General Ngozi Okonjo-Iweala, has been focusing on sustainable development and trade. The WTO has admitted that the trade regime cannot operate in isolation from broader societal challenges. This is already a good step forward, as nobody would have thought the WTO would do this.

The European Institute of Peace, in a recent study on climate and peacemaking, reminds us that fragile and conflict-affected countries are the most exposed and vulnerable to environmental degradation. We all know this, but what do we do in a systemic manner? There are people working on equity issues alongside climate and biodiversity, but again, these efforts are often separated and siloed from one another. We need to move further. Training in leadership skills is very important. One rule I would emphasize is to leave your ego out of it; we are pushing a common issue that needs to be solved together.

NOTES

1. Walt Kelly, “We have met the enemy and he is us,” 1980, Toni Mendez Collection, Billy Ireland Cartoon Library and Museum, The Ohio State University, [Digital Collections](#).