



DANCING WITH FOOD SYSTEMS TRANSFORMATION IN A TIME OF GLOBAL CRISES

AN OPEN LETTER TO GLOBAL ALLIANCE MEMBERS

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Dear Global Alliance members,

Anyone who knows me, or has heard me speak in public, knows that I'm a big fan of the late Donella Meadows – environmentalist, journalist, farmer, systems thinker, both a Pew Scholar in Conservation and Environment and a MacArthur Fellow. She wrote a brilliant piece called *Dancing With Systems* that I have returned to time and again.

We are at a critical moment in history. A contested moment. A fragile moment. A moment full of anxiety, decision-making, way-finding, stock-taking, soul-searching, and needing to attend to the deep imperative to create a brighter and more beautiful future. Food systems transformation is central to this agenda given its undeniable links to climate, migration, zoonotic disease, biodiversity loss – the myriad global emergencies which we currently face.

Meadows' *Dancing With Systems* holds deep relevance for all of us now. Against the backdrop of our commitment to food systems transformation and the global coronavirus pandemic, here's my take on translating Meadows' deep wisdom on 14 ways we must learn to dance with food systems transformation in a time of global crises. There is no more urgent time for philanthropy to know and face the realities of the Anthropocene and dance accordingly.

1. **GET THE BEAT.** *“Starting with the behavior of the system directs one's thoughts to dynamic, not static analysis – not only to ‘what's wrong?’ but also to ‘how did we get there?’ and ‘what behavior modes are possible?’ and ‘if we don't change direction, where are we going to end up?’” (Meadows).* Before we can figure out how to dance with a system we need to learn its history and understand what its patterns are. This is an ancient principle of wayfinding – to know where you are going you have to know from whence you came. This is as true for a fast-emerging global pandemic as it is for long-entrenched global food systems. We must continue to be vigilant in asking the questions that help us get the beat.
2. **LISTEN TO THE WISDOM OF THE SYSTEM.** *“Aid and encourage the forces and structures that help the system run itself” (Meadows).* We are all system actors. We all have a hand in shaping our food systems, from the farmworker in the field to the policy maker in the capital to the parents trying to ensure a healthy meal at the end of the day. David Nabarro, Special Envoy to the WHO on

COVID-19, just offered in his [COVID-19 Narrative Seven](#) an important example of this: the people and authorities in China, South Korea, and Singapore “have shown that COVID-19 outbreaks can be suppressed through the engagement of people backed up by highly organized public health services, good quality patient care and full support from all sectors of government.” Nabarro goes on to say that post-COVID-19 “We will appreciate that the ways in which people connect with and relate to each other are vital for healthy, functioning societies: they determine our capacity to make rapid sense of events even in the face of uncertainty.” This is the wisdom of the system.

3. **EXPOSE YOUR MENTAL MODELS TO THE OPEN AIR.** *“Mental flexibility – the willingness to redraw boundaries, to notice that a system has shifted into a new mode, to see how to redesign structure — is a necessity when you live in a world of flexible systems” (Meadows).* The COVID-19 pandemic shines a stark light on the need for radical food systems transformation and the need to broaden our frame of the problem. In the Global Alliance’s [Unravelling the Food-Health Nexus](#) report, a key finding is that debates about food systems are particularly vulnerable to framings that obscure key connections and therefore undermine the basis for systemic action. For example, “food security is often framed in terms of ‘feeding the world,’ i.e., delivering sufficient net calories at the global level. Narratives and solutions put forward by agribusiness firms, international agencies, governments, and a variety of other actors often emphasise this aspect of the challenge. Approaches of this type tend to minimize the questions of how, where, and by whom food is grown, the questions of distribution, access, and power on which hunger is often contingent.” We must continue to expand our mental models of our food systems in order to effectively redesign their structures.
4. **STAY HUMBLE. STAY A LEARNER.** This is about learning. What are we learning about how we get into a crisis? What can we learn from how we act in the face of a crisis? Meadows says, *“In a world of complex systems it is not appropriate to charge forward with rigid, undeviating directives. ‘Stay the course’ is only a good idea if you’re sure you’re on course. Pretending you’re in control even when you aren’t is a recipe not only for mistakes, but for not learning from mistakes. What’s appropriate when you’re learning is small steps, constant monitoring, and a willingness to change course as you find out more about where it’s leading.”* This is hard in a world where we want solid answers and firm metrics especially when confronting today’s crises, otherwise it’s messy and more nebulous. But Meadows was onto something here that can’t be ignored. Ultimately, this is the only way to approach rapid change in a highly vulnerable and unpredictable environment.
5. **HONOR AND PROTECT INFORMATION.** Something I say frequently to the team at the Global Alliance as we work to make a dynamic network of 28 foundations run smoothly is “feed the system with information.” It’s Meadows’ 11th commandment: *“Thou shalt not distort, delay, or sequester information. You can drive a system crazy by muddying its information streams. You can make a system work better with surprising ease if you can give it more timely, more accurate, more complete information.”* For example, the more timely, accurate, and complete information we can generate on the true cost of our food systems, making visible the full environmental, social and human impacts, the faster we can move forward toward the kind of new policies, practices, science, and community engagement necessary to make food systems work better.

6. **LOCATE RESPONSIBILITY IN THE SYSTEM.** *“‘Intrinsic responsibility’ means that the system is designed to send feedback about the consequences of decision-making directly and quickly and compellingly to the decision-makers” (Meadows).* As this relates to food systems, the most obvious example might be the “polluter pays” principle that requires those who create environmental damage to pay for the clean-up. This is manifest in the United Nations Framework Convention on Climate Change (UNFCCC) which “established that co-operation on climate change should recognise the ‘common but differentiated responsibilities’ of all countries, based upon their respective capabilities. This principle reflects several aspects of equity including that the largest share of historic and current global emissions has originated in developed countries, and thereby applies historical responsibility or the ‘polluter pays’ principle.” How else can we locate responsibility in the system?

7. **MAKE FEEDBACK POLICIES FOR FEEDBACK SYSTEMS.** On feedback policies, Meadows says that *“a dynamic, self-adjusting system cannot be governed by a static, unbending policy. It’s easier, more effective, and usually much cheaper to design policies that change depending on the state of the system. The best policies ... contain feedback loops, and design learning into the management process.”* We are experiencing this real-time as feedback loops become acutely transparent in reaction to COVID-19 – supply chain interruptions, food shortages, higher prices, farmers health, food waste. Erin Biehl of Johns Hopkins Center for a Livable Future wrote in a [recent article](#), *“Decisions made in the days after an outbreak can have longer term impacts, which then have other impacts, and so on. The plans a government, business, community, or individual puts in place to prepare for and respond to such events should intentionally consider the potential impacts on the food system.”* We must seriously consider the feedback loops we are (re)creating in our food systems as we respond to the challenges of the pandemic, for example [grocery store workers in Minnesota classified as emergency workers](#).

8. **PAY ATTENTION TO WHAT IS IMPORTANT, NOT JUST WHAT IS QUANTIFIABLE.** *“Don’t be stopped by the ‘if you can’t define it and measure it, I don’t have to pay attention to it’ ploy. No one can precisely define or measure justice, democracy, security, freedom, truth, or love. No one can precisely define or measure any value. But if no one speaks up for them, if systems aren’t designed to produce them, if we don’t speak about them and point toward their presence or absence, they will cease to exist” (Meadows).* The impacts of COVID-19 will be measured by GDP, hospital visits, deaths, and other things that can be easily measured, but as a global community we are all collectively focused on what is really important and unquantifiable – human connection, community solidarity, the importance of being nurtured by nature. This is precisely why the Global Alliance is a principles-based organization. Our work is guided by a [set of seven shared principles](#): renewability, resilience, equity, diversity, healthfulness, inclusion, and interconnectedness. These principles shape our vision of the future of food, express our values, and encompass the change we want to make. We believe our food systems should be designed to produce them and we loudly and with conviction speak up for them as the most important social technologies we have to help us create a better future of food.

9. **GO FOR THE GOOD OF THE WHOLE.** *As you think about a system, spend part of your time from a vantage point that lets you see the whole system, not just the problem that may have drawn you to focus on the system to begin with” (Meadows).* This is the whole-systems perspective that, fortunately, more and more people are understanding and embracing. Take our [synthesis of 20 major global reports on food systems transformation](#) published between 2017 and 2019 with brief summaries of each report, as well as a high-level analysis of cross-cutting themes. Most reports use a systems approach that recognizes a more expansive definition of food systems to develop their visions and strategies calling for: interdisciplinary research and cross-sectoral policies that span traditional issue silos (e.g., health, environment, infrastructure, agriculture, etc.); require the participation of diverse stakeholders; and, acknowledge the many geographic and cultural contexts that shape the world’s food systems.

10. **EXPAND TIME HORIZONS.** This is not about looking further into the future. It’s about expanding our understanding of short- and long-term phenomena and how they are nested one within the other. As we think about our vision for food systems transformation and our reactions to shocks to those systems, it’s not just about casting forward 10 years from now but understanding how actions taken now will have immediate impacts, and how some will resonate out decades from now; and, likewise, how actions taken 5 years ago still influence our food systems and ability to respond to shocks today. As Meadows says: *“When you’re walking along a tricky, curving, unknown, surprising, obstacle-strewn path, you’d be a fool to keep your head down and look just at the next step in front of you. You’d be equally a fool just to peer far ahead and never notice what’s immediately under your feet. You need to be watching both the short and the long term – the whole system.”*

11. **EXPAND THOUGHT HORIZONS.** *“Defy the disciplines. It will be sure to lead across traditional disciplinary lines. To understand that system, you will have to be able to learn from – while not being limited by – economists and chemists and psychologists and theologians” (Meadows).* As argued by Pavan Sukhdev and Alexander Müller in [Measuring what Matters in Food Systems](#) *“The agriculture and food system, as viewed and experienced by the agronomist, environmentalist, sociologist, economist, and health specialists, along with their dominant narratives ... are competing schools of thought and different levels of specialization, or sub-sector focus. Each perspective offers its own different yet fundamental contribution. We must bring these communities closer together in order to have maximum impact.”* Inherent in having “maximum impact” is that only through this sort of collaboration can we better understand systems, their boundaries, their behaviours, and systemic solutions that rely on multiple perspectives and expanded thought horizons.

12. **EXPAND THE BOUNDARY OF CARING.** *“The real system is interconnected. No part of the human race is separate either from human beings or from the global ecosystem. It will not be possible in this integrated world for your heart to succeed if your lungs fail, or for your company to succeed if your workers fail, or for Europe to succeed if Africa fails” (Meadows).* This is the “do no harm” clause. Women, smallholder farmers, vulnerable populations, Indigenous Peoples, and poor and marginalized communities carry an uneven burden of negative impacts caused by the current industrial food system. The low power and visibility of those most affected by food systems jeopardizes a complete understanding of the impacts, leaving major blind spots in the evidence

base. As well, it creates a situation in which those exposed to the greatest risks are not seen or heard making it less likely for problems to be prioritized politically. This moment requires us to continue to expand the boundary of caring in all we do.

13. CELEBRATE COMPLEXITY. We so want to get the answer right. To have a set course, and stick to it, and have it work out effectively. But we all know that doesn't happen. As Meadows rightly notes: *"Let's face it, the universe is messy. It is nonlinear, turbulent, and chaotic. It is dynamic. It spends time in transient behaviour on its way to somewhere else, not in mathematically neat equilibrium. It self-organizes and evolves. It creates diversity, not uniformity. That's what makes this world interesting, that's what makes it beautiful, and that's what makes it work."* The same is true of the food systems and, dare I say it, even the beauty and opportunity we find in crises. The less we fight wanting to have total control, the more we learn to adapt, and the stronger, more creative, more resilient our world will be.

14. HOLD FAST TO THE GOAL OF GOODNESS. *"Examples of bad human behavior are held up, magnified by the media, affirmed by the culture, as typical. The far more numerous examples of human goodness are barely noticed. They are not news. And so expectations are lowered. Fewer actions are taken to affirm and instill ideals. We know what to do about eroding goals. Don't weigh the bad news more heavily than the good. And keep standards absolute."* I would add to this the words of another wise sage of the modern age. Parker Palmer, of the Centre for Courage & Renewal, talks about the tragic gap, by which he means "the distance between what is and what we know to be possible; the tension between the reality of the moment and the possibility that something better might emerge." At the Global Alliance and in our member foundations, we work in the world of social change which is by and large about goodness, a better world, more creative solutions to intractable problems which inspired our [Beacons of Hope](#). One of the big challenges for all of us, especially at this time, is to hold fast to the goal of goodness while sitting in the tragic gap. Squarely in it. So that our responses and actions towards a much needed transformation are aspirational but realistic and truly serve to help us strive for what's possible to meet the world's needs.

It's a long list which runs the risk of being quite daunting, but I can't think of another time that has required us to let loose and dance with systems so wildly.

Yours in collaboration,



Ruth
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