

The Accountability Framework We Need: Lessons from Sustainability Science for the Post-2015 Development Agenda

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Elements for an Accountability Framework for the Post-2015 Development Agenda

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The world has embarked on a search for what may emerge as the most ambitious set of global governance mechanisms since the post-World War II period. That period ushered in the institutions that helped drive the advances in peace and prosperity which, while incomplete, remain one of humanity's greatest achievements. The world we face today is as different from 1945 as 1945 was to the 19th century. It follows that our governance mechanisms must break new ground in ways that are as transformative to our era as the post-WWII institutions were to theirs.

Perhaps nowhere is this imperative more clear than in monitoring and accountability mechanisms. Here I will spell out the relevant characteristics of the management challenge from the perspective of research in sustainability science. Then I will derive elements for an accountability framework that will support a transition to sustainable development.

I derive these conclusions from a variety of forms of engagement in my 25-year career: scholarship on environmental governance; production of the Environmental Sustainability Index and Environmental Performance Index, dating to 1999; involvement in multilateral assessments, including the Millennium Ecosystem Assessment, Global Environmental Outlook, and Intergovernmental Panel on Climate Change, participation in expert meetings of the Open Working Group, and partnerships in developing countries aimed at making place-based long-term sustainable development a reality.

Thinking Like a System

A fundamental insight from sustainability science is that human well-being depends heavily on the functioning of linked dynamic systems spanning physical, biological and socioeconomic domains. This insight manifests in multiple ways. Understanding *feedbacks* that link system behaviors is of crucial importance, for example. What may appear to be a viable trajectory when examined from a narrow perspective could be highly risky when other systemic linkages are taken into account. Moreover, *predictability is very difficult* because of the complexity that emerges from interacting systems. The precise way in which systems interact varies considerably across space, and therefore understanding and managing the interactions requires a high degree of *customization to particular landscapes and situations*. Finally, although all relevant systems are dynamic, when they change from one dominant state to another, they create conditions that pose severe challenges for human societies: *Transitions are dangerous*.

That transitions can be dangerous deserves some elaboration. This generalization is supported by findings in multiple fields.

- The demographic transition, from high birth rates and high death rates to low birth rates and low death rates, creates challenging economic and political conditions, and is associated with relatively high rates of social upheaval and instability.
- Political transitions, from narrowly held political power to broadly shared political power, often engender periods of unstable politics and elevated risk of conflict.
- Land use transitions, from undisturbed to pastoralist to cultivated to urbanized, are associated with perturbations in disease ecology and hydrology as well as heightened social tension over land access.
- Economic transitions, such as from predominantly agrarian to predominantly industrial systems, generate shifts in political coalitions that can be destabilizing.
- Large-scale climatic transitions have been linked to broad-based pressures on societies, sometimes resulting in collapse.

Moreover, it appears that when multiple transitions take place simultaneously in a particular place, risks are magnified in a multiplicative manner. That is, there is reason to think that combined dangers can be bigger than their simple sums.

These insights are not unique to sustainability science. In fact, one could make a strong case that they have been discovered as defining features of our age, across a range of policy domains. We have learned, for example, that avoiding financial crises, preventing disease epidemics, averting political violence, and achieving a range of other goals requires understanding and managing complex systems.

Implications for Accountability Frameworks

Now more than ever, we are framing long-term goals in terms of system behavior as opposed to end points. Our biggest disasters come when we manage systemic transitions badly and when we fail to understand the implications of system behavior. Therefore it is not enough to know where we are located on a set of individual policy targets. Rather, we need to know if relevant systems are destabilizing, if we are equipped to handle systemic shocks, and if the policy measures individual actors are undertaking are appropriate to the systems within which they unfold.

In the early days of the automobile, driving was a complicated affair. The various systems that made locomotion possible -- combustion, transmission, cooling, lubrication, steering, suspension, electrical, braking -- were vulnerable to breakdown and a journey of any distance required being prepared to monitor these systems and to fix them if they broke down. Steering modern society toward a sustainable future will have more in common with such ordeals than the comparatively easy time modern cars provide today.

The systems-oriented nature of our sustainability challenges gives rise to the following specific requirements for accountability mechanisms for post-2015 goals.

They must be sensitive to the three forms of complex linkage that are necessary to understanding and managing systems:

- Linkages **across multiple processes** within a specific landscape. For example, to understand the sustainability of an area undergoing rapid intensification of agriculture, there is a need to track processes involving water, energy, soil, food, nutrition, jobs and biodiversity, among others, as they interact in that particular place.
- Linkages **across long distances**, rooted in global networks of trade, mobility and communication.
- Linkages **across stakeholders**, rooted in their different interests, frameworks of understanding, and practices.

They must be built on information systems that are fit for purpose.

Although it has become fashionable to pin great hopes on "big data" to meet grand challenges, often accompanied by dreams of such data being provided at zero or low cost, in fact the gap between what is needed to understand the systems that drive sustainability trends and what is being provided is growing. It is irresponsible to wish for easy fixes to this problem. We need an accountability framework that rests on reliable, robust information streams, targeted appropriately so as to be cost-efficient. In light of the abject failure of the traditional multilateral organizations to provide such information, it is

inevitable that new institutional mechanisms will need to be devised, rooted in public-private partnerships and other innovations.

They must be organized around a spirit of learning, discovery and mutual adjustment.

Accountability, in the context of navigating through complex systemic interactions toward a sustainable future, is not grounded in the kind of accounting associated with rows and columns in ledgers. The process required at present goes by different names -- adaptive management, polyarchy, social learning, pathways to sustainability, science-policy co-production. Effective managers understand it as simply "good management principles." The collection, synthesis and distribution of information should be optimized around goals of deepening understanding, solidifying robust coalitions of action, helping those who fall behind get on track, and helping those who do well spread the secrets of their success.

They must be organized around time frames that are appropriate to the change processes they are meant to engender.

Although the Millennium Development Goals were rightfully cheered for orienting planning and accountability around a 15-year time frame, as opposed to the more conventional project-oriented mindset in which 4 years is considered "long term," it is a pernicious fallacy to make the assumption that the same 15-year time frame is appropriate across the board for the post-2015 agenda. For some elements of the post-2015 agenda, 30 years might be a far more sensible time frame. The coincidence of 2045 with the 100-year anniversary of the UN Charter might even help spark deeper introspection and dialogue about the future we want. Obviously, longer-term goals and accountability mechanisms require decomposition into more immediate elements; but immediate elements in the absence of a long time horizon will doom many policy areas to work with sustainability blinders.

They must be organized around entry points that are primed for transformative change.

Complex linked systems have an almost infinite number of ways they can be operationalized into specific accountability mechanisms. The task of the policy entrepreneur is to find entry points that have the potential to take off in a vibrant, progressive direction. Candidates that are under discussion include the food-water-energy nexus; the green economy; and management of ecosystem services. The point is not to simply repeat the traditional sector-based accountability mechanisms we have inherited, but to choose the innovative ones we wish to leave as our legacy.

Conclusion

The world has changed in profound ways in the last few generations. Such change is reflected in the nature of the deliberation over the post-2015 development agenda. We

now recognize the underpinnings of Earth system processes on human well-being, and we recognize the complex web of connections that combine both to threaten our future and to give us leverage points for achieving the future we want.

Accordingly, the accountability mechanisms we establish to advance our new goals need to reflect an equally bold departure from the status quo. The embarrassment of combatting 21st century problems with 20th century solutions can no longer be excused. The accountability mechanisms we need are systems-focused, integrated, action and learning oriented, participatory, and sensitive to place-specific dynamics.

Continue the dialogue

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