WORKSTREAM 1: DROUGHT RESILIENCE AND GLOBAL MECHANISMS

Lead Organizations:

A LOOK BACK AT THE PAST 10 YEARS

As a result of direct, indirect, and persistent impacts, droughts pose significant challenges for achieving the sustainable development in many parts of the world. The body of research and experience point to three important trends in linking drought-related disasters and long-term risk reduction (i) a growing convergence on understanding the social construction of drought impacts, (ii) the need for people-centered early warning systems, and; (iii) the benefits of proactive approaches to risk reduction. In addition, there has been notable progress in recent years in data availability, and drought- and drought impacts modelling. More recently, there has been increasing recognition that faster rates of change in the earth system and the globally-interconnected complex economic development, water cycle, landscapes, and ecological pathways are compounding heat and drought events and cascading impacts through networks, infrastructure and livelihoods. Such rapid rates can drive surprises and transitions for which early warnings of sequences of events and emerging thresholds become increasingly necessary (but not sufficient) to guide proactive decisions. Reducing the impacts of drought will contribute to the achievement of several SDGs, in particular poverty reduction, zero hunger, good health and well-being, gender equality, clean water and sanitation, and sustainable cities and communities. The experiences of the IDMP, the JRC, the U.S. National Integrated Drought Information System, FEWS NET and IGAD among others illustrate that drought early warning can be a proactive social process whereby networks of organizations conduct collaborative situational assessments to guide action. However, as noted in the UNDRR Special Report on Drought there is increasing recognition need for coherence across international, national and local policies and practices, and also in development cooperation in support of disaster risk reduction, climate adaptation, sustainable and resilient development.

MAIN CHALLENGES

The strong theoretical rationale for coherence in systemic risk management is not always reflected in practice, indicating mismatches in knowledge, processes, and institutions. A number of forward-looking United Nations global agreements and frameworks were adopted in 2015 and 2016, including the 2030 Agenda, the New Urban Agenda, SAMOA pathway (for SIDS), the Paris Agreement and the Sendai Framework, each with its own objectives and mandates. However, it is only in combination that they cover the range of potential benefits of sustainable development in the face of systemic drought-related risks. Integrative approaches to land use, watersheds, and drought interactions take different forms and operate with different institutions and governance mechanisms. Challenges include fragmented responsibilities, a perception of a temporal mismatch between short-term impacts and cumulative risk, and funding structures that can create perverse incentives, for example resulting in the prioritization of short-term financing needs over long-term risk reduction. These can lead to an underestimation of the spatial or temporal correlation among extreme events and underlying risks e.g. drought, land cover, and soil degradation; limitations in models and scenarios; and in undermining the benefits of early warnings and proactive approaches. For example, technologies focus on enhancing farm productivity, might improve adaptive capacity through trade and higher incomes for some but at the same time drive emissions and lead to direct on-farm changes (e.g. soil quality decline) and off-site impacts such as groundwater extraction and surface water nutrient overload.

POTENTIAL SOLUTIONS

Transformations that address future drought-related resilience as a systemic problem will require profound shifts in institutions, technologies, consumption patterns and personnel, as well as the ecological, economic and social processes they influence. Integrating an understanding of everyday activities and attendant vulnerabilities and capabilities is central. The way forward includes building enabling conditions for the transition to drought-related, systemic risk governance and resilience partnerships at the national and local levels. An enabling approach by itself (i.e. without a broader coherent framework) may neglect significant structural or political obstacles to effectiveness and burden those facing greatest vulnerability with the tasks and financing of transformation. As recognized after the global financial crisis in 2008, early warning systems were in place to identify precursor signals and anomalies in the overall performance of the financial system, yet they failed to detect what are now understood to have been clear signals. In many cases, limitations to scaling-up, replicating or sustaining “successful” project-based approaches are exposed when overwhelmed by severe sustained drought events, cumulative impacts of sequences of smaller events, or globally-networked impacts on water resources, food production and trade. In addition to national drought information systems and resilience partnerships, a new global mechanism is required to effectively address systemic drought risks across the international, national and local levels.

Such a mechanism would facilitate vertical and horizontal governance, accelerating transitions towards a systems-based approach for drought risk management and risk reduction and facilitating strategic coherence (joint visions and policy goals), operational coherence (institutions and services), and technical coherence (knowledge development and applications). Among other objectives and tasks, a cross-cutting global mechanism would align goals and investment for financing drought-related systemic risk reduction across international mechanisms and development agencies (such as the 2030 Agenda, the Paris Agreement, the Aichi Biodiversity targets, Addis Ababa Action Agenda, and the Sendai Framework) by:

- Developing international collaboration and dialogue on drivers of globally networked risks and vertical and horizontal coordination across regions, nations and communities
- Piloting and incorporating innovative financial strategies to upgrade settlements, and promote benefits of technology and efficiency of water, energy and land use
- Developing processes for sustaining early warning across timescales and regional geographies
- Engaging countries and communities through shared capabilities, for monitoring, assessing and forecasting drought-related systemic risks and increasing drought literacy
- Developing thematic working groups, including industry and civil society actors, for facilitating coordination and pooling knowledge focused on feasibility, capacity and accountability
- Using the opportunity provided by drought events to prioritize resilience building and build back smarter and greener across global mechanisms at appropriate scales

Finally, there in urgent need to transition away from practices that create drought-related risks underpinned by financial systems and economic models that prioritize optimization and efficiency above human and ecosystem health and well-being. These pathways must draw upon diverse value bases and sources, particularly indigenous and local knowledge, and articulate shared values and opportunities for realizing the global benefits and dividends of adaptive governance of systemic risks for global, national and local communities.