

TwR: Transformations within Reach: Synchronizing Resilience and Agility for Sustainable Development

Mission. Learning from COVID-19 among other global threats, we aim to identify levers of change to trigger systemic transformations in societal decision-making systems. These transformations should radically improve both the resilience of our society to sustainability threats, and its agility to adapt to new opportunities and needs.

Phase 1

In early 2020, the International Institute for Applied Systems Analysis (IIASA) and the International Science Council (ISC) launched a joint initiative to glean lessons from the COVID-19 crisis for the future of society. A series of consultations with internationally renowned experts provided recommendations on what should be done to move towards a more sustainable world that would also be more prepared for negative shocks. In a relatively short period of time, the initiative mobilized over 200 experts from various disciplines and every region of the world through a series of consultations. The first consultations involved science experts to assess the problem and identify the desirable transformative changes that had also been revealed to be achievable. In the second consultations, large group of practitioners were consulted on whether they were indeed feasible; as well as to identify key barriers that would need to be overcome. In the third and final consultation, policy and decision makers were invited to discuss the political feasibility as well as the policies and measures needed to make the proposals possible. They looked at four areas: governance for sustainability, strengthening science systems, resilient food systems, and rethinking energy solutions. The complete reports can be found at: <https://covid19.iiasa.ac.at/isc/outcome/>.

The first phase of the initiative underscored the “what”: the key to sustainability transformation is better societal decision making (SDM). Existing governance systems were not sufficiently effective in dealing with COVID-19. Some societies and some individual actors did mobilize rapidly, but many of their responses occurred in a fragmented, ad-hoc and suboptimal manner. With little or no coordination across national borders and based on rather skewed input from science, countries proceeded to introduce restrictive measures, travel bans and other measures. These responses could have been more effective if they were based on international cooperation and comprehensive scientific advice. The same problems are likely to affect our response to other global crises.

Phase 2



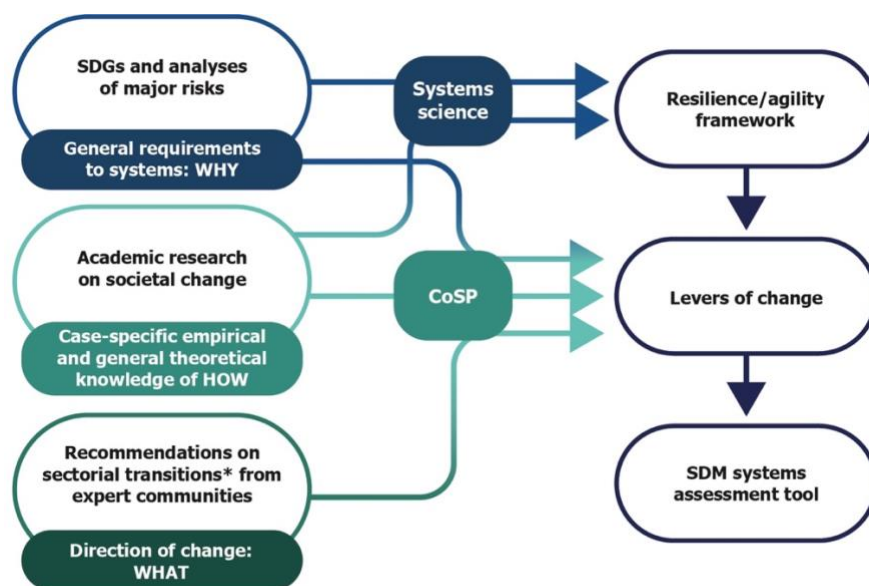
Figure 1. Resilience and Agility for sustainable development

The second phase of the initiative will address the “how” and identify effective levers of change in societal decision making (SDM). Society needs both *resilience* to multiple systemic risks, i.e., to sustainability-decreasing tipping points, and the *agility* to adapt to new opportunities, i.e., the ability to facilitate and harness sustainability-increasing tipping points (Figure 1). Identifying effective levers of change to achieve these intertwined objectives requires understanding of societal transformations. It must be based on knowledge that integrates natural and social sciences, as well as hands-on policy experience.

Sustainable development faces barriers and threats too complex to be overcome in an ad-hoc way. Instead, we need synchronized responses, with optimal effectiveness. By strengthening capacities for systematic long-term planning and evidence-based decision-making, we can prepare societies to manage the multiple risks and sustainability challenges of our inter-connected world. This will be the aim of Phase 2 and by so doing, ensuring that we are back on track on achieving the SDGs.

Building on the successful online consultation of Phase 1, Phase 2 will bring together experts from academia, public and private sectors, and civil society, forming a community of scientists and practitioners with relevant knowledge and experience (CoSP). During Phase 2, an effort will be made to reach out to a vaster and more diverse and inclusive group of experts – across disciplines, geographies, gender, and age composition, beyond those who participated in Phase 1. This will help ensure that the TwR (Figure 2) is a bold initiative that complements and benefits from the many similar initiatives that exist around the world while at the same time avoiding duplication. While also acting as ambassadors to the much-needed sustainability transformations, CoSP will help synthesize all the available sources of data and insights in order to:

- Develop a conceptual framework for resilience and agility to inform the cross cutting systemic transformation of formal and informal SDM that would facilitate sustainable development.
- Identify critical levers of change in SDM that would increase resilience to negative shocks while ensuring the necessary agility to new opportunities and emerging needs.
- Develop a tool to assess the capacity of governance and other SDM systems to implement the identified levers of change. It is essential that these recommended levers are practical.
- Conduct case studies to apply these new insights to specific geographic and thematic contexts to understand the drivers of change, including those related to behavior, and testing effective science-policy-society interfaces.



* ... directions of change, sensitive intervention points etc.

Figure 2. Phase 2 – TwR

Anchored at IIASA, TwR is conceived as an open environment for multi-stakeholder engagement and partnerships. It will use academic and practical knowledge, and recent insights from research and implementation projects, to determine the levers of change and build the assessment tool. The architecture of this environment includes CoSP, the internal and external IIASA network, and an ecosystem of projects from IIASA, ISC, and a broader global community that will eventually be associated with the platform as sponsors and partners of the initiative. This broader community will also serve as a platform for capacity building and enhancement of science equality. IIASA will host the initiative's secretariat.