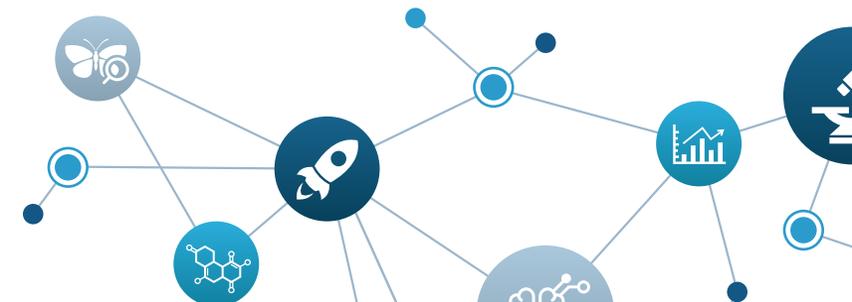


Transformations within Reach:

Developing Research towards Achieving the SDGs in Post COVID-19 Era

Insights from the
The IIASA/ISC Consultative Science Platform on
Bouncing Forward Sustainably: Pathways to a post-COVID World



Disclaimer: The key messages presented here are the ones selected by the speaker and may reflect her personal biases

The IIASA-ISC Initiative on *Bouncing Forward Sustainably: Pathways to a post-COVID World*

- Recognized the losing battle to achieve transformative changes required to mitigate the climate change problem and achieve the SDGs
- Believed the transformative potential arising from the response to Covid 19 in terms of new innovations and/or new evidence
- Understood the importance of strengthening the core defining frameworks of economic systems to enhance resilience to systemic shocks
- Recognized the need to support and accelerate such transformative green-shoots for them to sustain
- Recognized also the urgency of such support to inform recovery packages and mitigate risk of slipping back to comfortable old normal
- Compensated for the inability to wait for full evidence by garnering renowned trans- and inter-disciplinary expertise from across the world to bear on our recommendations
- Identified four key themes to focus attention on: two on core frameworks of Governance and Science Systems; one major contributor to mitigating the climate problem and enabler of SD – Energy; and, one representing major vulnerabilities for any country – Food.

Process and Outputs

- Organized three intensive and representative consultations on each theme with participants from, broadly:
 - Science/academia/research communities
 - Practice community – private sector, finance, NGOs...
 - Policy and decision makers/influencersto identify and develop the transformations within reach
- Currently sharing select key messages arising from this initiative

Achieving the SDGs

- We can hope to achieve SDGs only if we are able to provide a safe and secure environment to populations. COVID 19, and its response
 - has threatened to push millions back into poverty and exacerbate inequalities (SDG1);
 - the most susceptible groups are being hit hardest by the pandemic, threatening SDG 10;
 - has added to pressure on food production, supply chains, and household incomes, with the poorest being most affected (SDG2);
 - highlighted lack of access to sanitation for billions (SDG6);
 - threatens to reverse the progress of SDG 3, which aims to ensure healthy lives and wellbeing for all; and many others...
- COVID 19 also demonstrates that SDGs can only be achieved through international collaboration

Humanity has unleashed extreme, multiple and compounding risks for itself – robust research needed to prepare for them!

- Develop risk scenarios of cumulative, compound multi-hazards and assess impacts
- Urgent focus on adaptation and resilience building, internationally and within country, needed -- including building resilience in dealing with non-linear system outcomes
- Not security, not independence – equity, justice and resilience has to be the new Mantra for development!
 - Strategic impact assessments must be re-designed and greater accountability brought in
- Systemic crises need systemic solutions
- High-powered ad hoc coordination mechanisms engaging multiple stakeholders must be set up

Research has to be systemic and must embed the values it advocates

Smart, evidence-based, adaptive governance needed

- Align recovery packages to the “future we want”
 - Intervene for multiple dividends
- Renew focus on decentralization/localization
 - Supported by a more conscious, green, globalization
- Harness the new consciousness in society – inclusive, participatory governance
- Create webs of social security – global, national and local levels.
- Reform, reconfigure, repurpose institutions of global governance.
 - Implement modern management systems

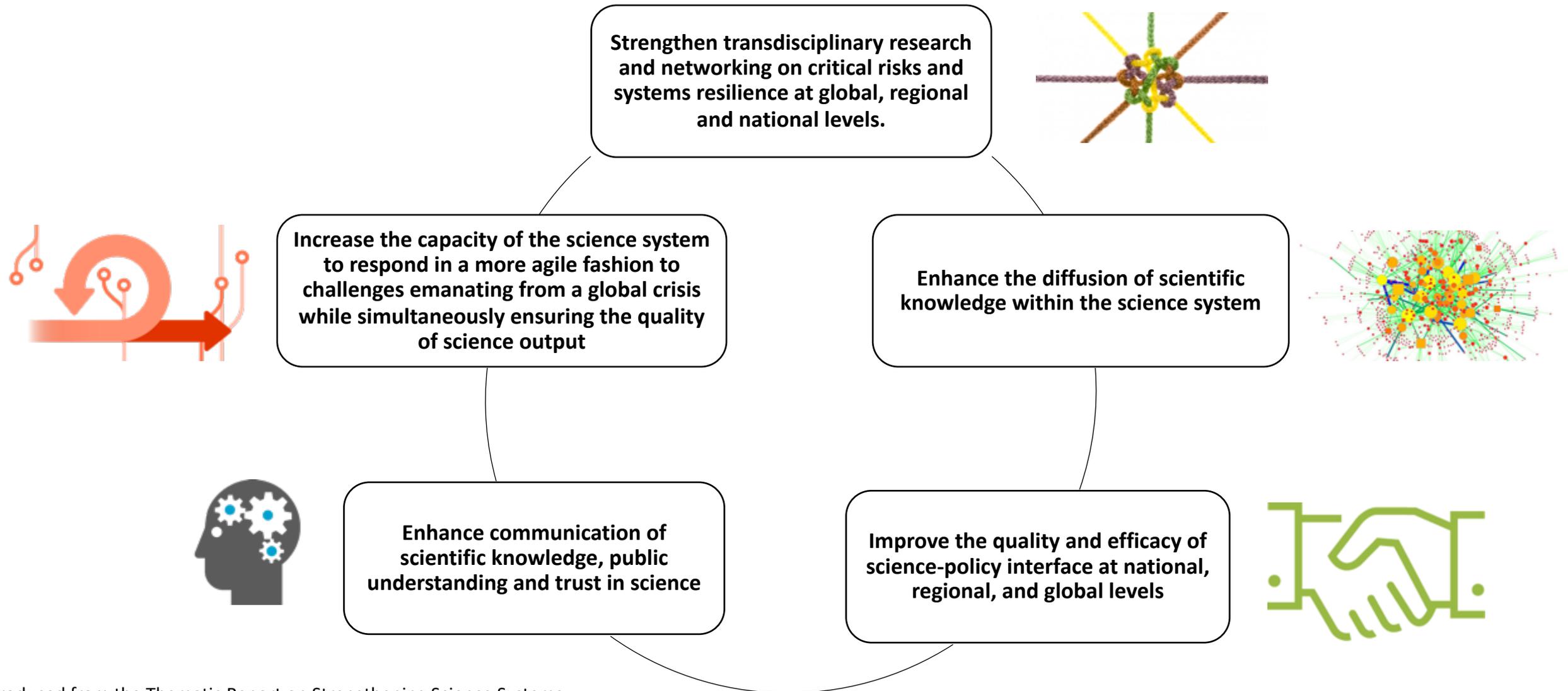
Research must provide the knowledge and data needed for informed decision-making in a timely manner and be trust-worthy

Science systems in urgent need of strengthening and reform

- In order to respond with agility and relevance, and to provide a systemic understanding of synergies and trade-offs to inform evidence-based decision making at all scales
 - Capacity building within science community needed. Strengthen international networks of scientists to enable faster knowledge and skills transfer
- The science-policy-society interface must be strengthened
 - Implying capability building in, both, scientists to design and communicate research and the wider society to absorb and use science effectively
- Incentive frameworks for sustainability science need design along the entire value chain of science production
- Open access to data and science to be mandated – private data too has to be made available for science
- Ensure science-based solutions situated for contexts

International research collaborations for capacity building and greater contextualization essential; Science responsiveness, assurance and communication key

Five major transformative changes that are required to move the science system to a new frontier of agility, reliability, and policy relevance



Energy solutions lie within and outside

- COVID-19 reinforced the fact that energy is primarily an enabler
- Demand reductions will drive transformation
 - Urban form
 - Building design and purpose
 - Work spaces and work
 - Mobility choices
 - Digitalization
- Energy resilience, not energy security, the way forward
 - Local empowerment
 - Decentralized, renewable energy-based solutions
 - Social innovations
- Shared, service economy can drive sustainable consumption – driving energy efficiency and renewable energy

Systemic research that also speaks to market design;
Citizen science deployment

The food sector multiplies systemic vulnerabilities

- The humanitarian and socioeconomic crisis triggered by the pandemic revealed vulnerabilities and inter-dependencies embedded in our current food systems.
 - The fragile nature of a system extremely sensitive to seasonal timelines
 - A vast unorganized labor force organized around this seasonality
 - Inability of Governance systems to adapt quickly to shifting demands of those most in need
 - The economic dependencies of many countries on exports
 - The inability to track effectively major changes in pattern of food demand and respond with agility

Resilience, equity and justice needs stand out in food systems

- Shift to a systems emphasis on resilience and equity rather than only on productivity and efficiency
- Integrate human and planetary health perspectives in the management of ecosystems
- Foster innovation, technology transfer and scale-up of agriculture sustainable practices
- Strengthen mechanisms for international collaboration and partnerships

Research itself needs to be more inclusive

In sum...

- Transformations are within reach, but require global collaboration and fact-based decision-making. Pursuing the required transformations will require new types of partnerships between governments, civil society, the public and the private sector.
- We have an opportunity and a need to re-design our life – our economic systems (Glocalization, decentralization); our worklife (remote working, digitization...); our choices (service economy, consumption...) and our social life (Community living)
- Science systems and the research community have to step up to be a part of the solution

Discussions