



Global Sustainable Development Report

Brief

Identification of Emerging Issues for Sustainable Development

Background

Inform policy- and decision-making processes about new and future opportunities as well as threats is a crucial component of well-functioning science-policy interfaces. General Assembly resolution 67/290 states that the High-level political forum on sustainable development (HLPF) shall ensure “the appropriate consideration of new and emerging sustainable development challenges”.

Scientific advice can steer public attention to issues that threaten human well-being and that require policy intervention. For examples, many environmental and health problems (e.g. climate change, malaria, HIV/AIDS) were brought to the forefront of political attention through a process of awareness creation relying on scientific expertise. Alternatively, and before issues enter the policy cycle, scientific expertise can be used to bring them to the attention of policy-makers, provide problem definition and assess the potential impacts of different policy options.

Policymakers are exposed to a broad range of analyses, rankings, and advice concerning emerging issues, prepared from a multitude of perspectives. The available material varies widely in terms of scales – geographical and temporal – and in the thematic coverage of issues. As such, it is not readily accessible for policy-makers in the HLPF. There is thus a need to systematize the existing material, informed by a sustainable development perspective.

Identifying emerging issues

While many approaches exist for identification of emerging issues, common features include the involvement of experts and formalized processes drawing on scientific evidence, assessments, and projections. Criteria can help to make explicit what counts as emerging issues. Impact and probability are common starting points. Additionally, criteria such as persistence, irreversibility, ubiquity, novelty, and potential for mobilization can also be considered. Priority, a criterion that is meant to capture an issue’s importance in terms of social and cultural norms or impact on already vulnerable and marginalized groups, can accommodate principles such as “ensuring that no one is left behind”.

The process of identifying emerging issues commonly starts with “scanning” for issues across a range of sources, informed by the purpose of the exercise. Horizon scanning is defined as “the systematic examination of potential (future) problems, threats, opportunities and likely future developments, including those at the margins of current thinking and planning”. Exploratory scanning focuses on

compiling potential emerging issues from a wide variety of data from different sources. So as to avoid a one-dimensional view on emerging issues, it is advisable to consult as wide as possible a variety of information sources, taking into account the scope and purpose of the exercise.

Preparation of the 2016 GSDR included material from a range of sources:

- Selected issues from emerging issue identification mechanisms within the UN system
- Snapshot of emerging issues and research priorities identified by national academies of sciences
- Selected issues from leading academic journals
- A summary of relevant points from crowdsourced science briefs.

Even a guided scanning process is likely to generate a large number of issues, which requires some form of filter to select issues of relevance to particular processes. In filtering emerging issues for consideration by policymakers at the international level at the HLPF, the following criteria could be useful:

1. Does the issue in question relate closely to the Sustainable Development Goals?
2. Is the issue a potential threat or opportunity of global, or at least international relevance?
3. Does management of the risk or harnessing of the opportunity depend on international action and cooperation?
4. Is the issue expected to persist (non-transient) and/or does it have a clear increasing trend?

Frameworks for looking at emerging issues

Following exploratory scanning of issues, the next step usually involves clustering or categorizing the issues in manner that facilitates analysis and insight. Various frameworks can be used – what works will depend on the context and overall goal of the research. For the purposes of the GSDR 2016, emerging issues from a selection of assessments and reports were categorized in accordance with three different frameworks. The so-called STEEP framework (which classifies issues in the social, technological, economic, environmental and political categories) appeared as a well-suited taxonomy for obtaining a broad categorization of potential emerging issues that is readily applicable to a number of disciplines and modes of analysis.

In the presentation of possible emerging issues, it may be useful to further group them in accordance with a rough

timeframe. The introduction of a temporal dimension for emerging issues can assist in clarifying institutions and policy-making levels that could have a potential interest in an issue.

Expert assessment of emerging issues

A common way to conduct exploratory scanning is through experts and expert networks. After a process of gathering issues, the initial list of issues or question is whittled down in the course of a combination of voting and discussions among experts. The preparation of the chapter involved an expert group meeting (EGM), which brought together more than twenty specialists from different fields. During this meeting, experts considered potential criteria for identifying emerging issues and agreed that the criteria presented above for the HLPF were relevant. They also considered a list of emerging issues for potential consideration by policymakers.

Prior to the meeting, an initial list of emerging issues had been collected using an open-ended online survey that was distributed to members of the sustainable development and scientific communities. As a next step, an electronic survey containing 85 issues was circulated to the participants in the expert group meeting, as well as larger group of experts, who were invited to score the issues on the basis of importance. The 20 emerging issues that were ranked highest by the contributors to the chapter were the following:

- Establishing governance mechanisms for the SDGs, from global (UN) to regional, national, and local levels.
- Coping with the increasing impacts of climate change.
- Political instability and social unrest from increased income and wealth inequalities.
- Ensuring access to affordable, sustainable, and reliable modern energy services for all.
- Accelerating the implementation of environmentally-friendly renewable energy.
- The need to develop alternative economic models that decouple economic growth resource use and minimize environmental degradation.
- The need to protect and restore ecosystems.
- Persistence of poverty globally, including the poor in rich countries.
- Strengthen and enhance the means of implementation and global partnership for sustainable development.
- Highly unequal distribution of household wealth across and within nations.
- Enhancing social protection and environmental protection in developing countries as a means to decrease inequalities and combat environmental degradation and climate change.
- Integrated assessment of sustainable development pathways.
- Increasing the sustainability, inclusiveness, safety, and resilience of cities and human settlements.
- Depletion of ocean fish stocks and exploitation of marine resources.
- Time lags of several decades between scientific findings and policy action.
- Migration and all forms of movement of people across borders due to changes in demographics, weather patterns, and other causes.
- Promotion of sustainable industrialization.

- Reduction of future agricultural yields due to climate change, especially in Africa.
- Inadequate funding for health systems, especially in developing countries.
- Putting in place the blend of governance forms and approaches required for the 2030 Agenda.

The need to select and evaluate issues against transparent criteria was clear in the expert discussions. So too was the need to explore connections among the issues, to synthesize issues where possible, and to identify common themes.

The consideration of the issues revealed numerous connections among them, suggesting that higher order synthesis was appropriate. Issues expressed as threats, technological opportunities or management and policy responses often relate to single, broader underlying problems. For example, the broad trend of climate change can be associated with emerging threats, opportunities, and policy responses.

The meeting categorized issues identified during the scanning exercise as the following. A first category was the operationalization of the 2030 Agenda for Sustainable Development and establishment of institutional and governance arrangements that explicitly recognize a role for science in policy and decision-making. A second category was key values to be protected or enhanced through sustainable development, including values which, while always implicit in the concept of sustainability, have gained greater recognition in recent years. A third category was critical processes of social, economic and environmental change that threaten sustainable development; in particular, processes that are novel, accelerating, approaching what appear to be dangerous thresholds and/or which have poorly understood causes and consequences. A fourth category was emerging opportunities to promote sustainable development, including technological options and policy responses to deal with novel and unresolved sustainability issues.

Informing the HLPF

Chapter 5 of the GSDR 2016 describes a methodology for identifying a limited number of emerging issues that could be considered by the HLPF when for the purpose of providing policy guidance. It shows that multiple sources should be considered for this purpose, as existing sources cover only a subset of the vast scope of sustainable development, and tend to focus on certain types of emerging issues. The chapter also suggest practical criteria that could be used to filter emerging issues from a large number to a limited set that can practically be considered each year by the HLPF. Lastly, the chapter reports on an attempt to test the proposed methodology and on the conclusions drawn by contributing scientists and experts in that process. Beyond producing a list of emerging issues, for the purpose of policy analysis it is important to replace those issues within broader frameworks where emerging threats, opportunities, management and policy responses can be jointly examined.

More information

The GSDR 2016, its Executive Summary and other related briefs and documents are available on the following website: <https://sustainabledevelopment.un.org/globalsdreport>