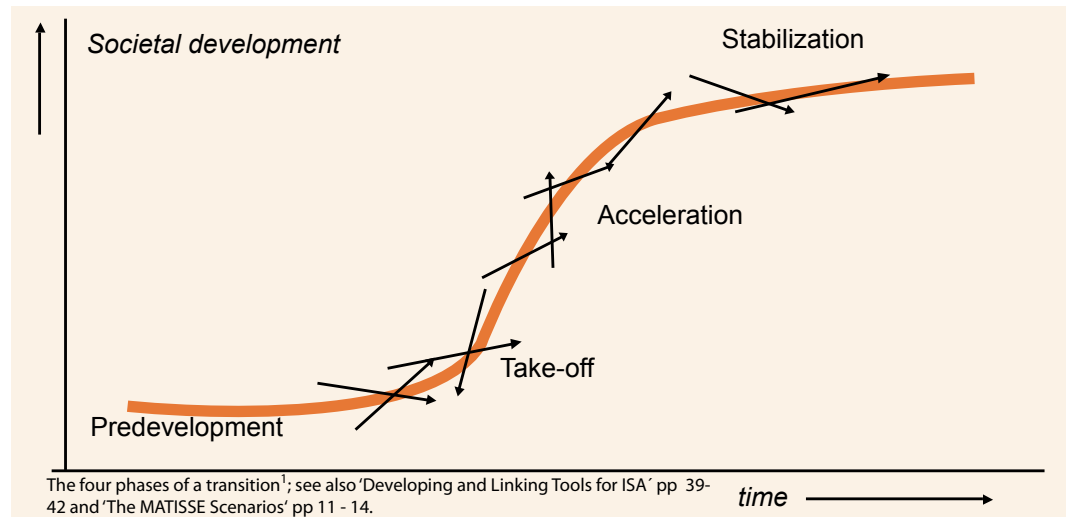


What is new about ISA?

Society faces a set of persistent problems that have a systemic pathology rooted in the prevailing development approach (see also pages 15 - 38). These problems have proven immune to the usual approaches to developing immediate, short-term solutions and conventional policy-making processes have difficulties in handling them. In order to find possible solutions to these problems, new approaches are required. Using a *transition-oriented* process, aimed towards searching, learning and experimenting, Integrated Sustainability Assessment (ISA) responds to these challenges.

The innovative approach of ISA is that it does not start from immediate solutions but begins with a search for solution directions by doing a set of experiments under the guidance of a long-term sustainability vision. By taking a comprehensive systems perspective, policy interlinkages are revealed and, thus, there is a greater chance of identifying 'win-win-strategies'. The ISA process can identify 'niche' development modes that are often overlooked in the policy process and are often held back inadvertently by policies that support dominant development modes. If these niches were to be supported or empowered, they might be up-scaled and eventually replace the unsustainable modes.

ISA helps to gain a better and systematic



understanding of the complexity of sustainability issues and of barriers to moving towards sustainability. This includes improved insights into the drivers of unsustainability. ISA is a normative, long-term process including a number of cycles through the four stages of scoping, envisioning, experimenting, and learning. It is concerned with developing holistic strategies and thus is complementary to more familiar policy assessment processes. The approach is not useful for every problem but is especially useful for persistent problems.

Developing a new language, a new discourse and new and broader frames in which to

discuss an issue are central to ISA. This requires multidisciplinary and multiscale analysis and participation of a wide range of stakeholders. The stakeholders become engaged in a social learning process, in which their views of the issues can potentially be changed – thus building a potential for transformative changes. This is a complex matter and a time consuming task.

The essential design requirements for ISA stem directly from its character and role in the policy development process, which is as an exploration of and instrument for regime change and transition. A suite of interlinked models, methods and approaches is needed.

Transition models play an essential role in ISA (see pages 39 - 42). They are explorative and heuristic models rather than predictive models, where agents (i.e., actors represented) play a crucial role. The conventional models used in integrated assessment are good at describing different development outcomes but are not helpful in showing how to get to these outcomes (i.e., process of transition). Neither are conventional models suitable for describing structural change. *Transition scenarios* are also an innovation that plays an important role in ISA (see pages 11 - 14). In contrast to conventional scenarios, transition



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scenarios include non-linear changes, such as bifurcations, radical shifts and surprises that describe transformative change. Traditional (predictive) models, transition models and transition scenarios therefore can be linked within an ISA process to provide additional insights.

Learning from case studies

The real world context for testing and further developing the ISA methodology and tools was provided by the MATISSE case studies. The case studies (see pages 15 - 38) have shown that ISA:

- Leads to a different problem perception and formulation than usual;
- Creates a scope of problem analysis different from that of conventional analysis;
- Leads to a wider range of possible solutions;
- Leads to an innovative set of transition pathways;
- Supports patterns of development that are compatible with the long-term changes occurring in the social-ecological system as a whole;
- Can contribute to changing the patterns of development, as well as to increasing long-term opportunities for development and improvement of quality of life;
- Provides a structured procedure to carry out assessments and analysis that integrates multiple domains, scales, problems, languages, and institutional arrangements

- in a coherent and intelligent manner;
- Plays a role in identifying and structuring niche developments;
- Can be useful in analysing the influence of political stakeholders;
- Links different case studies with each other as well as different model activities; and
- Implements and analyses new scenarios by using newly-developed or improved models as well as model analyses.

¹ Rotmans, J.; Kemp, R.; van Asselt, M. et al., 2000: Transitions and Transition Management. For a Low Emission Energy Supply. A Study for the 4th National Environmental Policy Plan (NMP4). Maastricht. Available at: www.icis.unimaas.nl/projects/nmp4/downloads/00_35_ab.pdf

Further Reading

Weaver, P.M. and Rotmans, J. (2006). Integrated Sustainability Assessment: What? Why? How?, MATISSE Working Paper 1. Available at: www.matisse-project.net

Rotmans, J. (2006). Tools for Integrated Sustainability Assessment: a Two-Track Approach. MATISSE Working Paper 4. Available at: www.matisse-project.net