

The Models

The Integrated Sustainable Development Goals (iSDG) Model

The iSDG model is used to simulate and analyse scenarios for the development of the Sustainable Development Goals (SDGs).

The model is based on systems theory. The model structure thus consists of stocks (e.g. population) and flows (e.g. births, deaths, migration), as well as feedback loops, and attempts to map this system behaviour over time. This results in delay effects and non-linear behaviour.

The iSDG model considers social, economic and environmental aspects, and therefore all three sustainability dimensions of the SDGs. Each dimension can be assigned to 10 sectors in the model, which are linked to each other (see Figure 1). The system boundary of the iSDG is the respective country for which it is applied, in this case Austria.

In order to be able to analyse development paths using the iSDG model, the model structure allows the implementation of different measures and policy instruments. This allows questions on the effective allocation of limited resources to different areas or on the positive and negative effects of policy interventions on SDGs to be analysed. The results of individual scenarios can be evaluated using indicators.

For a detailed description see:

<https://isdgdoc.millennium-institute.org/en/docs/0101-introduction>.

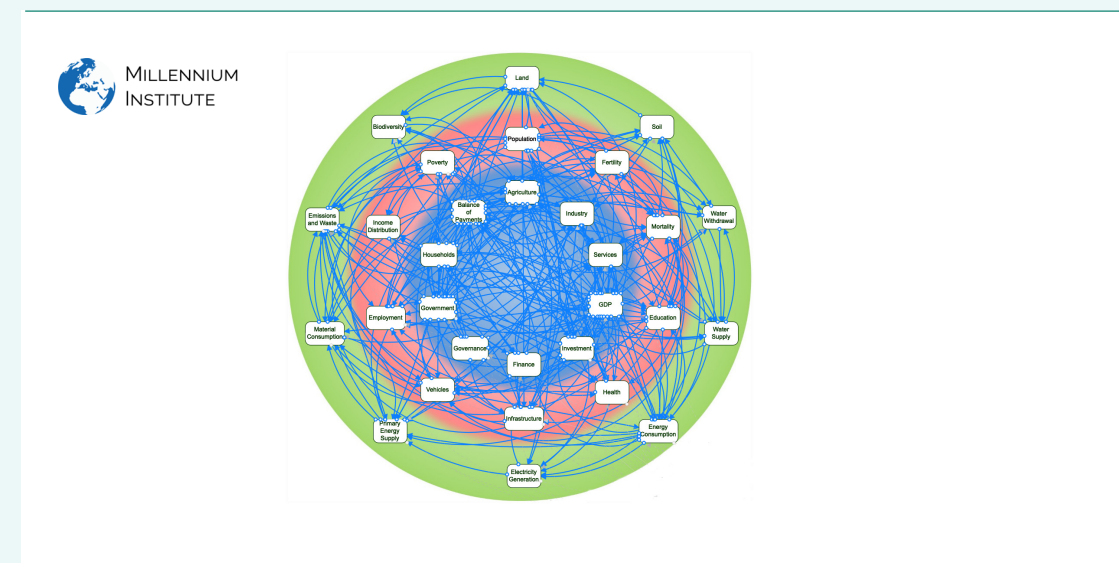


Figure 1: Schematic representation of the 30 sectors of the iSDG model (ecological sectors in green, social sectors in red, economic sectors in blue)

The Inequality and Poverty Assessment Model (IPAM)

The model allows an evaluation of measures to achieve objectives with regard to potential challenges and potential conflicts.

The IPAM model consists of four levels, which can be visualised as intertwined circles (see Figure 2):

- The outermost circle integrates and condenses five dimensions into diverse social-ecological theories of inequality and justice (distribution; community; legitimacy / legal framework; recognition; climate & environmental adaptation).
- The middle outer circle describes categories that help to identify what is needed to achieve the goal (distribution: access to resources and availability; community: offers and participation; legitimacy/legal framework: Participation, transparency and monitoring; Recognition: socio-cultural background and special needs; Climate and environmental adaptation: minimise vulnerabilities, maximise proactive strategy and capacities).
- The middle inner circle contains the instruments and measures that are taken to achieve the goal, which is symbolically located in the centre of the innermost circle.

To apply the model, the participants must identify implementation options for measures and assign them to the dimensions and categories. At the end, a weighting is made along the pieces of the cake (i.e. the five dimensions from outside to inside) with regard to the challenge for the implementation of the measures.



Figure 2: IPAM Dimensions