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## Modelling interactions between mitigation, adaptation and sustainable development

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Managing the interdependence of climate mitigation, adaptation and sustainable development requires a good understanding of the dominant socioecological processes that have determined the pathways in the past. Key variables include water and food availability which depend on climate and overall ecosystem services, as well as energy supply and social, political and economic conditions. We present our initial steps to build a system dynamic model of nations that represents a minimal set of relevant variables of the socio- ecological development.

The ultimate goal of the modelling exercise is to derive possible future scenarios and test those for their compatibility with sustainability boundaries. Where dynamics go beyond sustainability boundaries intervention points in the dynamics can be searched.