**Participatory Modeling – Summary of method for upload on Participedia**

Models are simplifications of reality that help us abstract and zoom into particular features of a system which we are trying to understand or predict. PM methods harness an ever-evolving range of conceptual and numerical models to help stakeholders understand complex systems and key dynamics under various conditions.

PM is a purposeful learning process that harnesses the knowledge of stakeholders to create formalised and shared representations of complex reality. In PM engagements, the participants use modeling practices to aid in the description, analysis of solutions trade-offs and in group decision-making and consensus-finding.

PM is widely applicable to socio-ecological, economic and other fields of engagement, but has been most commonly used in environmental management and contested resource planning contexts. It has also been successfully employed in complex policy, regulatory or decision-making settings.

The benefits of PM are diverse but can be grouped into: (i) improving policy and decision making about complex systems, (ii) supporting good governance, and (iii) building a common ground for consensus building and partnership development by harnessing a diversity of viewpoints belonging to local, expert and/or specialised stakeholders. PM offers a high level of ownership in decision-making and a structure which allows goals and outcomes to be accessible for evaluation and revision.

PM further applies the OECD principles on good governance as it increases legitimacy, transparency and inclusiveness. Ideally PM involves the co-creation of the models with the stakeholders, and thus supports Collaborative Learning. Sometimes already-existing models and tools are used to help stakeholders interpret complex data or concepts, and thus help them to make informed decisions. PM can provide an accessible path to engaging non-scientists in the scientific process.