

## **General Model Description**

The model simulates the decision-making process of the water authorities and residents (hereafter “actors”), and its effect on the spatial distribution of socio-hydrological vulnerability in Mexico City. The model operates at the scale of a census block and it is fed by census blocks geographical attributes which correspond to each of the criteria defined by the actors. Each actor is represented in the model as an agent that modifies the census blocks geographical attributes. Census blocks attributes are modified by the decisions taken by the agents and through four submodels: water supply, flooding, gastrointestinal diseases and subsidence.