Assessing the Salience, Credibility, and Legitimacy

of a Land Use Model in the NMR of Vietnam

by

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Abstract

In the northern mountainous region of Vietnam the shift from former swidden systems towards permanent cropping systems entails the particular threat of soil erosion and land degradation. Therefore, a land use model (LUCIA) was developed that aims at simulating the impact of different land use and management practices on parameters such as crop productivity and soil erosion.

The purpose of this study was to assess the applicability of the LUCIA model with local stakeholders (farmers, village heads, extension workers), used in a companion modelling approach. Six stakeholder groups were separately invited to two workshop meetings each, a first meeting to identify and develop scenarios in a participatory approach and a second meeting to present the results of the simulations. With the help of questionnaires it was analysed how the participants perceived the salience, credibility, and legitimacy of the LUCIA model. These parameters served as indicators for evaluating the applicability of the model. A final focus group interview revealed insights into participants' opinions about the model and its outcomes.

The results show under which conditions and by what means the companion modelling approach can be a promising way to initiate discussions related to important agricultural and environmental issues, how it promotes shared learning processes, and how it can be used as a decision supporting tool.

Key words: Salience, Credibility, Legitimacy, Companion modelling, Sensitivity analysis