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Addressing equity in land use decisions: a case study in the Oil and Gas sector

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ABSTRACT

Equity in the distribution of the expected effects of decisions on present and future generations plays a key role in the sustainability debate. Sustainability requires development paths to meet "fundamental human needs while preserving the life-support systems of planet Earth" (Kates et al., 2001). These paths should enhance ways of taking advantage of wide-spread and long-term opportunities and reversing the undesirable trends in the economic, social and ecological domains.

This paper aims at contributing to address intergenerational and intragenerational equity concerns in impact assessment, focusing specifically on decisions concerning the use of land. Firstly, a framework for conceptualizing equity implications at different scale in space and time is proposed. This framework consists of a set of question-based criteria and related indicators, which can be used as metrics for measuring intra- and inter- generational equity in land use decisions, by comparing present state against future trends. The framework is then applied to a case study related to oil and gas development in the Basilicata region (Southern Italy). The case study is used to test how different decisions involving the future use of land will affect the distribution of benefits at intra- and inter- generational level. Scenario storylines, representing interactions among environmental, social and economic concerns, are drawn and tested against the framework. Trade-offs between human and environmental systems under the different scenarios are examined and compared by multi-criteria analysis. Finally, suggestions are provided on how to include in a more comprehensive way intra- and inter- generational equity considerations to support decision-making processes in land use planning.

REFERENCES

Kates, R. W., W. C. Clark, R. Corell, J. M. Hall, C., et al. (2001). Sustainability science. Science 292: 641-642.