

Master in Political Ecology
Academic year:2018-2019

SOCIAL MULTI-CRITERIA EVALUATION

Instructor

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Objectives

The course will introduce social multicriteria evaluation framework for public decision making, paying attention to theoretical, methodological and empirical issues. It will familiarize you with the foundations of SMCE, basic concepts, methods and case studies. By the end of the course you should be able to structure a decision-making process in a multicriteria structure; defining alternatives and criteria to support participatory processes and decision making.

Structure

The course has 5, 2-hours classes. Each class will involve a mixing of teaching, discussion and group work, and will be divided in two: theoretical and practical. Students will split in groups and develop a case study to apply the knowledge acquired during the theoretical part of the class.

Evaluation

Groups of 4 people will choose a case study to apply a social multicriteria evaluation, that will be presented in the last class of the course. The case study should include the description of the context and social actors interests, the multicriteria structure and a social and technical evaluation.

Program outline

1. Introduction to SMCE. Theoretical foundations and practical applications

Munda, G., 2004. Social Multi-Criteria Evaluation (SMCE): methodological foundations and operational consequences. *European Journal of Operational Research* 158 (3), 662–677.

Banville, C., Landry, M., Martel, J.M., Boulaire, C., 1998. A stakeholder approach to MCDA. *Systems Research and Behavioral Science* 15 (1), 15–32

Proctor W, Drechsler M., 2006. Deliverative multicriteria evaluation. *Environmental and Planning C: Government and Policy*; 24:169-190

Etxano I., Barinaga-Rementería I., García O., 2018. Conflicting Values in Rural Planning: A Multifunctionality Approach through Social Multi-Criteria Evaluation. *Sustainability* 18(5).

Garmendia, E., Gamboa, G., Franco, J., Garmendia, J., Liria, P., Olazábal, M., 2010a. Social multi-criteria evaluation as a decision support tool for integrated coastal zone management. *Ocean and Coastal Management* 53, 385–403.

2. The multicriteria structure in SMCE: Alternatives and criteria

Gamboa G, Munda G. The problem of windfarm location: A social multicriteria evaluation framework. *Energy Policy* 2007; 35(3):1564e83.

Bouyssou, D., 1990. Building criteria: a prerequisite for MCDA. In: Bana e Costa, C.A. (Ed.), *Readings in Multiple Criteria Decision Aid*. Springer, Berlin, Heidelberg, New York.

3. Combining participatory processes and multicriteria evaluation

Dente B., Fareri P., Ligteringen J., 1998. A theoretical framework for case study analysis. In B. Dente et al. (eds.), *The Waste and the Backyard*, 197-223. Kluwer Academic Publishers.

Nazarea V., Rhoades R., Bontoyan E., Flora G., 1998. Defining indicators which make sense to local people: Intra-cultural variations in perceptions of natural resources. *Human Organization* 57 (2).

Garmendia E., Gamboa G., 2012. Weighting social preferences in participatory multicriteria evaluations: A case study on sustainable natural resource management. *Ecological Economics* 84. 110–120.

4. Multicriteria methods in a SMCE context

Munda G., 2008. The Issue of Consistency: Lessons Learned from Social Choice Literature. In Munda G, *Social Multi-Criteria Evaluation for a Sustainable Economy*. Chapter 6. Springer-Verlag Berlin Heidelberg.

Roy B., 1990. The outranking approach and the foundations of Electre methods. In: Bana e Costa (Eds.) *Multicriteria decision aid*. Springer-Verlag.

Brans J.P., Vinke Ph., Mareschal B., 1986. How to select and how to rank projects: The PROMETHEE method. *European Journal of Operational Research* 24: 228-238