Methods and Models for Environmental Conflicts Analysis and Resolution

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INTRODUCTION

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The Thesis is a "Work in progress"⟵ Open Issues.

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are...

- to review various issues:
  - $\Rightarrow$ Game Theory,
  - $\Rightarrow$ System Dynamics,
  - $\Rightarrow$ Decision and Social Choice Theory, Multicriteria tools...

$\Rightarrow$ to merge those issues in "new" and "original" proposals models, algorithms,

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Basic framework: collaborative shared decisions and commitments

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⇒ The general framework

⇒ The descriptive tools and examples

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(2) Formalization of procedures, tools, models;

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$\Rightarrow$Two Appendices: “classical” relevant topics, aim: make the Thesis as self contained as possible.

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Analysis of *SD* as a tool and a meta-tool.

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- ⇒ The use of barter models for the exchange of items (bads or goods).
- ⇒ The use of game theory for the problem solving through a bottom-up coalition construction.
- ⇒ The mapping of multicriteria methods over voting methods and an analysis of their properties.

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THE USE OF AUCTIONS FOR THE ALLOCATIONS OF CHORES ("BADS")

(1) Dutch auction with negative prices: the auctioneer proposes a chore and an increasing amount ($\leq M$) of money until when one of bidders calls stop and accept the chore.
(2) English auction with negative prices: the auctioneer proposes a chore and a starting amount of money L to the bidders that start bidding lower and lower amounts of money until one of them stops the descent and gets the chore.
(3) A sort of first price auction with negative prices: the auctioneer proposes a chore, each of the bidders makes a bid and the one who bids less gets the chore.

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No numerary good, no common scale, both goods and bads, independence or additivity

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That's all, folks!!! Thank u...

Main Personal References


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Barter models

Conference S.I.N.G.4, "Spain Italy Netherlands Meeting on Game Theory", June 26 - 28, Wroclaw, Poland, 2008

L. Cioni

The analysis and resolution of environmental conflicts: methods and models

CSEAR 2008 (Second Italian Conference on Social and Environmental Accounting Research), Rimini, Italy, 17-19 September, 2008

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Methods and Models for Environmental Conflicts Analysis and Resolution

EAEPE (European Association for Evolutionary Political Economy) Annual Conference - "Labour, Institutions and Growth in a Global Knowledge Economy", Rome, Italy, University of "Roma Tre" 6-8 November, 2008