

# Cooperazione e competizione nello sfruttamento di una risorsa rinnovabile

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## Abstract

In this paper we propose a static model describing the commercial exploitation of a common property renewable resource by a population of agents. Players can cooperate or compete; cooperators maximize the utility of their group while defectors maximize their own profit. Agents aren't assumed to be divided into the two groups from the beginning; by solving the static game we obtained the best response function of  $i$ -th player without making other agents positions. Then, the Nash equilibria we calculated point out how different strategies - all the players cooperate, all the players compete or players can be divided into cooperators and defectors - can coexist.

**Keywords** Resource Exploitation, Game theory.

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