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Conservation auctions: an online double constraint reverse auction experiment

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Abstract Conservation auctions are reverse auctions designed to allocate payments for environmental services. We perform an online experiment to study a reverse auction that combines both a budget and a target constraint, i.e., a double constraint auction. We compare the performance of this auction format to target and budget constraint formats according to three different criteria: the number of units purchased, the budget spent and the unit cost. Our results show that the performance of the double constraint auction, compared with announcing only a target constraint or a budget constraint, depends on the buyer's objective(s). Indeed, our main conclusion is that no ranking satisfies our three criteria simultaneously.

Keywords— Reverse auctions, Conservation auctions, Double constraint

A new version of this working paper will be available soon