Abstract:

This paper discusses strategic communication (cheap talk) that arises during the allocation of a limited budget or resource, in the context of water allocation to two farmers by the social planner. Each farmer’s need of water is bounded and only he knows about his exact need of water. Each farmer asks privately for an amount of water to the social planner and then the social planner allocates water to the farmers. The utility function of each farmer is the standard quadratic loss utility function where more water than the need causes flood or less water causes drought. The social planner is a utilitarian and her utility is the sum of the utilities of the two farmers. In this framework, when the amount of water is limited, there is no equilibrium where both the farmers ask exactly their own need. All equilibria exhibit the standard partition intervals. Equilibria are computationally difficult to solve and the novel phase transition method has been discussed to overcome the difficulty. The results in this model have been compared to the existing literature. There are some results that are new in the literature and in contrary to the results in the existing models.

http://www.isid.ac.in/~pu/seminar.html