

Coordination mechanisms in collective agri-environmental programs:

Experimental evidence

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Abstract

Collective agri-environmental programs are gaining interest as a means to enhance spatial coordination and compliance, and to reduce administrative and monitoring costs. Such programs assign incentives based on a collective rather than an individual performance. The success of a collective incentive depends on its design and internal coordination among group members, but the extent to which these mechanisms enhance or diminish the group performance are not yet well understood. This paper comprehensively evaluates the environmental, welfare and distributional consequences of combining peer reward and exclusion threats with external collective incentives using a framed field experiment among next-generation Danish farmers. Our results show that in terms of individual effort, collective incentives with peer reward and exclusion threats perform at the same level as a collective incentive without them. However, peer reward and exclusion threats undermine the performance of collective incentives in terms of the overall environmental effectiveness, social welfare and equity. These findings imply that caution is necessary in designing collective agri-environmental policies with internal coordination mechanisms as they may prove counterproductive.

Keywords: Collective incentive, peer reward, exclusion threats, agri-environmental programs, water quality, framed field experiment