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Cooperative Game Theory and Small Hold Farming: Towards A Conceptual Model

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Abstract : Cooperative game theory (CGT) postulates that groups of players are crucial units of the decision-making and impose cooperative behaviour. Accordingly, cooperative games are regarded as competition between coalitions of players, rather than between individual players. However, the basic supposition in CGT is that the cooperative is formed by all players. One of the emerging questions in CGT is how to develop cooperatives and fairly allocate the payoff. Cooperative Game Theory (CGT) may provide a framework and insights into the ways small holder farmers in rural resettlements may develop competitive advantage through marketing cooperatives. This conceptual paper proposes a non-competition model for small holder farmers of homogenous agri-commodity under CGT conditions. This paper will also provide brief insights into to the theory of cooperative games in-order to generate an understanding of CGT, cooperative marketing gains and its application in small holder farming arrangements. Accordingly, the objective is to provide a basic introduction to this theory in connection with economic competitive theories in the context of small holder farmers. The key value proposition of CGT is the equitable and fair sharing of cooperative gains.

Keywords: game theory, cooperative game theory, cooperatives, competition

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