

Title: **Profit Sharing in Renewable Resource industries: Implications and Optimal Management**

Authors: Jacob LaRiviere, University of California, San Diego (USA)

Abstract: In renewable resource industries, labor is commonly paid with a share of the harvested resource rather than with a per unit-of-effort wage. Share cropping in agriculture is one well-known example and entitlement of the crew to a share of the revenue from the sale of the catch is almost universal among commercial fishing fleets. This paper shows that sharing arrangements have substantial implications for the industry's profits, optimal resource management, and the resource's ecological state. Effectively, sharing agreements can interact with fluctuations in natural capital to cause inefficient investment levels and skew industry rents toward labor. As a consequence, optimal regulatory policy for such industries must account for the implications of such sharing arrangements. The model demonstrates why management tools like individual transferable quotas in fisheries, have had unexpected ecological benefits in terms of increasing and stabilizing fishery stocks. Finally, the paper provides an illustrative example using the US Pacific albacore fishery.