



Measuring Total Sustainable Income from California Ranches: An Economic Analysis of Natural and Human Resources Management

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Economic sustainability of ranching in California is vital for the conservation of rangelands as working landscapes that provide social and environmental benefits as well as traditional market commodities to society. Since all these benefits cannot be fully evaluated with conventional financial analysis, which focuses on cash-flow and short-term gains in income and expenditures, ranching often seems to be a business that is only marginally profitable. We conducted an economic analysis based on the Total Economic Value theory for four northern California oak woodland ranches, re-defining profits and uses and applying an in-depth accounting system known as the Agroforestry Accounting System. This system accounts for the dynamic flows of resources and resource assets to measure the total economic and environmental values these operations provide. Incorporating the valuation of the durable assets involved in the production process, we are able to estimate the total sustainable income (Hicksian income) generated by these ranches for an average year at 2007 prices. The results reveal a number of private and public benefits from ranches that demonstrate their real value. We also find differences in the rationalities followed by the ranchers. Divergent strategies for management of natural and human resources result from ranchers behaving as utility maximizing agents based on their goals.

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