Effectiveness of incentives for agri-environment measure in Mediterranean degraded and eroded vineyards

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The evaluation of the economic damage caused by soil erosion assumes great importance. It serves to increase awareness of the problem among farmers and policy makers. Moreover, it can promote the implementation of conservative measures at the field and basin level by spurring the development of more sustainable soil management practices. In the present study we have developed a new approach to evaluate the incentive for the adoption of Agri-Environment Measure (AEM) in Mediterranean degraded and eroded vineyards. In order to estimate this incentive, the replacement cost and the loss of income are calculated under two different soil management such as Conventional Tillage (CT) and Cover crop (AEM). Our findings show that the incentive could range between the loss of income due to AEM adoption and ecosystem service benefit (RCCT – RC AEM). In the case of study the incentive ranged between 315 € ha⁻¹ (loss of income) and 1,087.86 € ha⁻¹ (Ecosystem service benefit). Within this range, the incentive amount is determined according to efficiency criteria taking into account the morphological conditions of the territory in which operate the farms. Moreover, a conceptual model on the public spending efficiency has been developed to allocate the incentives where the economic return in term of ecosystem service is higher.