Geophysical Research Abstracts Vol. 19, EGU2017-1303-3, 2017 EGU General Assembly 2017 © Author(s) 2017. CC Attribution 3.0 License.



Living terraced landscapes: Exploring the viability of mountain terraced vineyards in Cyprus

Christos Zoumides, Elias Giannakis, Adriana Bruggeman, and Corrado Camera Energy, Environment and Water Research Center, The Cyprus Institute, Nicosia, Cyprus (c.zoumides@cyi.ac.cy)

Dry-stone terracing is an intensive cultivation practice that has been implemented for centuries in the Mediterranean region. The Troodos Ophiolite Complex on the island of Cyprus covers an area of 2332 km2 with 31% mean slope gradient, and consists of 140 small communities with a total population of around 50,000 inhabitants. Agriculture is practiced on dry-stone terraces with narrow (1–3 m) to medium-base (3–6 m) bench, constructed by cutting and filling in slopes with gradient between 20 and 40%. The main crop grown on terraces is wine grapes. However, many of the vineyards on terraced hillsides are being gradually abandoned and dry-stone walls remain unmaintained, causing a domino effect of collapsing terraces and leading to soil erosion and sedimentation of downstream infrastructure. The main reasons for the gradual decline of terraced landscapes are the ageing of farming population, the depopulation and marginalization of Troodos communities, the small size of agricultural plots, the high cost of labour and the loss of know-how on dry-stone wall maintenance. Despite these socio-economic issues, policy reforms, especially after the accession of Cyprus to the European Union in 2004, have created new challenges and opportunities, and have focused on improving the viniculture's quality rather than quantity. The new appellation of origin launched in 2007 that define where the wine-grapes are grown, as well as the incentives to create small regional wineries, helped maintain the population of some communities and the vine cultivations on dry-stone terraces.

The aim of this study is to analyse the determinants of success or failure in sustaining the terraced vine-yards in Cyprus. More precisely, the study explores the characteristics that determine the investment (or not) in terrace maintenance and analyses the interlinkages between farming practices and business strategies. The analysis is based on grape and wine production cost data that is acquired by interviews conducted with winery managers as well as individual farmers, in both maintained and non-maintained terraced vineyards. Preliminary results indicate that the income of farms with well-maintained terraces is not solely derived from grape growing, but also from product differentiation and off-farm activities, such as recreational tourism. On the other hand, farmers with poorly maintained terraces seem not capable to exploit niche market opportunities that generate added value. From a policy perspective, the preservation of terraced landscapes can be supported through targeted measures that aim at improving the quality of vinicultural products, as well as better marketing strategies and consumer awareness of the importance of wine produced on mountain terraces.

This study has received funding from the EU FP7 RECARE Project (GA 603498).