Which are the best practices for MSc programmes in sustainable agriculture?

Fátima Baptista [a], Patrícia Lourenço [a, b, c, *], Vasco Fitas da Cruz [a], Luís Leopoldo Silva [a], José Rafael Silva [a], Manuela Correia [a], Pietro Picuno [d], Evangelos Dimitriou [e], Georgios Papadakis [e]

[a] MED - Mediterranean Institute for Agriculture, Environment and Development & Departamento de Engenharia Rural, Escola Ciências e Tecnologia, Universidade de Évora, Pólo da Mitra, Ap. 94, 7006-554, Évora, Portugal
[b] CICGE - Centro de Investigação em Ciências Geo-Espaciais, Faculdade de Ciências da Universidade do Porto, Observatório Astronómico Prof. Manuel de Barros, Alameda do Monte da Virgem, 4430-146, Vila Nova de Gaia, Portugal
[c] Agroinsider Lda., R. Circular Norte PITE, Edf. NERE, Sala 12.10, 7005-841, Évora, Portugal
[e] Agricultural University of Athens, Iera Odos 75, Athina, 118 55, Greece
[d] University of Basilicata, Via Nazario Sauro, 85, 85100, Potenza PZ, Italy

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ABSTRACT

Programmes of education for sustainable development are important to reformulate and revise educational programmes in Sustainable Agriculture. Higher education institutes emerge as learning places to integrate sustainable development into the educational system, through graduation and MSc programmes, to provide a more effective response to the higher environmental and agriculture concerns. The aim of this study was to identify the best practices to be included in a MSc programme of education for sustainable development in agriculture based on a questionnaire prepared and distributed to agrarian sciences experts. The questionnaires were developed in order to define the fundamental competences/expertise, to identify the best practices and the methods of training/learning that should be taken in consideration in a MSc programme in Sustainable Agriculture. The results showed that the fundamental expertise of MSc programmes should be based on knowledge transfer of agricultural measures to mitigate the impact of climate change on agricultural systems. MSc programmes in Sustainable Agriculture should include interdisciplinary courses related to sustainability and agro-environmental technologies, such as Precision Agriculture, and incorporate adaptive and mitigate practices as those used in the Circular Economy strategy. Traditional face-to-face training methods are considered the most important forms of training/learning in a MSc programme in Sustainable Agriculture. However, due to COVID-19 pandemic, online learning methods, traditionally considered not suitable for MSc programme in Sustainable Agriculture, became important by providing online education. Information and communication technology and technological tools showed to be important skills to effectively implement online learning and to improve the efficient access and use of up-to-date information of the agricultural sector.

1. Introduction

One of the great challenges of humanity to the development of Sustainable Agriculture is to feed a growing world population in a sustainable way, preserving and maintaining a dynamic balance between the economy, society and the environment (Fernandez et al., 2018; Nuttavuthisit 2017). In order to produce changes in agricultural practices towards a sustainable agriculture, Higher