Online training platform for the Agricultural Knowledge and Innovation System (AKIS) in Greece*

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Abstract

The Agricultural Knowledge and Innovation System (AKIS) promotes innovation by utilizing various tools such as application technologies, practices, and e-learning platforms. It is crucial for farmers and those involved in agriculture to continually update their knowledge to reflect changing technologies and best practices in agricultural production. One of the main goals of the project, which was funded by the Hellenic Foundation for Research and Innovation (HFRI) under the PhD thesis titled "Evaluation of the Perceived Efficiency of the Agricultural Knowledge and Innovation Systems in Greece", is creating an eLearning platform as the repository of knowledge for AKIS. This paper aims to present materials from an online training platform course designed for agronomy students. The course aims to encourage potential farmers or farm advisors to participate in the AKIS system by developing knowledge of AKIS and an understanding of how AKIS works regarding interactive innovation processes. The proposed course can help increase awareness of AKIS among farmers by facilitating further support for developing innovative solutions in agriculture.

Keywords

AKIS, e-learning, innovation, knowledge, training

1. Introduction

Agriculture and the agri-food sectors face a constellation of challenges among which meeting a growing demand for food within an inconsistent environment that poses several threats (economic, environmental) to farm production [1,2,3]. Hence, innovation processes are increasingly necessary to meet the demand for novel solutions in products, processes, and services [4,5] and are increasingly conceptualized as the outcome of collaborative networks, where information is exchanged and learning processes take place aiming at an expanded knowledge system [6]. Farming competitiveness is enhanced by promoting innovation, and new technologies, and supporting young entrepreneurship, whilst ensuring a fair income for farmers. Lately, AKIS studies have emphasized the importance of involving farmers directly in the innovation process to identify the best response to farm challenges and improve innovation processes.

At the same time, the European Union's (EU) recent Common Agriculture Policy (CAP) reform (EU 2021/2115) aims to enhance the AKIS across the member states. Within the context of the recently reformed CAP, EU members' CAP Strategic Plans are trying to tackle current challenges by adopting

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a balanced approach that aligns also with the European Green Deal's priorities for a more resilient, green, and digital agriculture. They advocate a new production model for agriculture and the entire agri-food sector while empowering the AKIS system.

To promote knowledge sharing and innovation, the reform proposes various policy instruments. There is a widespread agreement among scholars and policymakers that knowledge is a critical resource to support European agriculture in addressing new challenges such as international competition, food safety, health, and environmental and climate change issues [7]. Farmers require different kinds of knowledge and information for day-to-day farming activities, such as nutrition, health, community organization, finance and marketing, and many other issues affecting their living standards [8]. It is also crucial for farmers and those involved in agriculture to continually update their knowledge to reflect on changing technologies and best practices in agricultural production. Soft skills (such as dealing with online platforms) are necessary for a thriving agricultural sector amid multiple challenges.

Farmers nowadays have access to distance learning and decision-making tools that were previously unavailable. This could potentially lead to significant changes in farm management practices [9]. To that end platforms [10] are tools that have a history of successful outcomes; they are thus considered a plausible tool in contemporary AKIS thinking and development. This paper focuses on an online training platform that provides knowledge about AKIS and awareness since the concept of AKIS and its governing principles are not widely known [11].

2. Online training platform

The online training platform (Fig. 1) aims to help agronomy students better understand the concepts, methods, and features of AKIS. According to [12,13], knowledge of the concept of AKIS can potentially increase the degree of adoption of innovative practices because the first concern of AKIS's actors is the exchange of knowledge about innovations [14]. The topics covered include an overview of AKIS (Table 1). The specific aim of the course is to provide comprehensive and deeper insights into AKIS at different levels: i) through a better understanding of the AKIS system at the country level, ii) through a better understanding of AKIS systems in Europe, iii) through the identification of Farm Advice Services (FAS) across Europe and iv) through relevant public policies. The material of the platform contains presentations, videos, links, and quizzes.

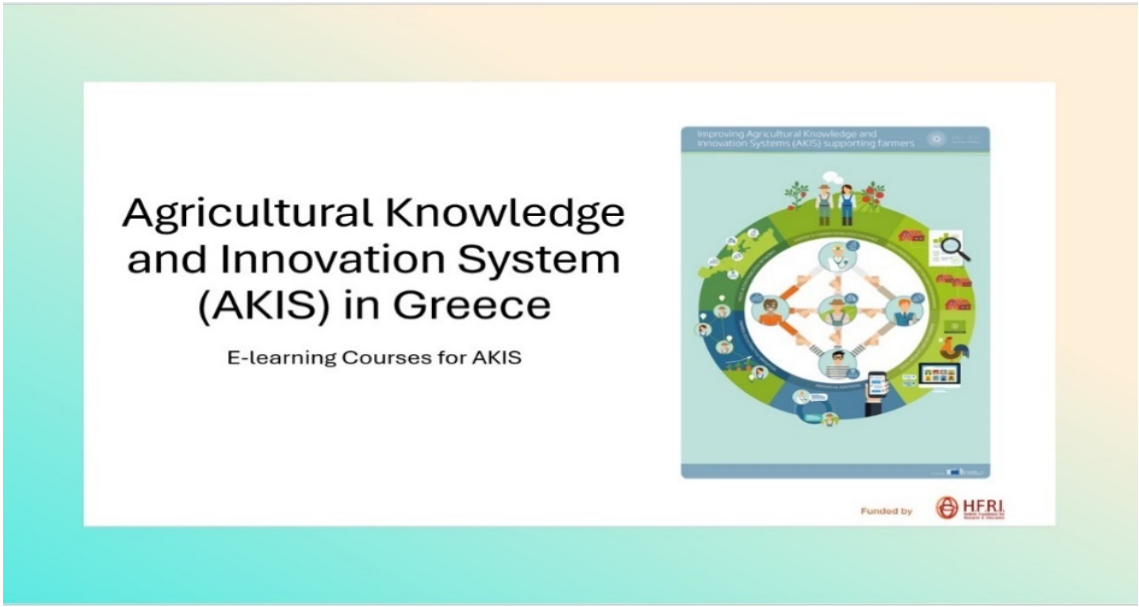

Figure1: The home page of the online training for AKIS in Greece

Table 1
Index of the online training platform

Topic	Lessons
Overview of AKIS in Greece	1. Introduction (The AKIS concept) 2. AKIS in Europe 3. The roles of Advisor 4. AKIS in Greece

3. Conclusions

The creation of such a course for training agronomy students based on an e-learning platform addresses a specific need, i.e. to expand awareness on AKIS. The latter is a system that connects people and institutions with the aim of promoting mutual learning and generating, sharing, and utilizing agriculture-related technology, knowledge, and information. It plays a critical role in helping farmers and rural communities to address current and future challenges. It's useful for agronomic students to know the operational determinants of AKIS such as organisation and governance of AKIS, type, and diversity of AKIS actors, supporting policy and dedicated resources, coordination mechanisms, and linkages among AKIS actors as future advisors or entrepreneurs in the agricultural sector.

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Declaration on Generative AI

The author(s) have not employed any Generative AI tools.

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