Fundacja Rozwoju Systemu Edukacji

Erasmus+
Enriching lives, opening minds.

Co-funded by the
European Solidarity Corps
of the European Union

Youth In Agritech

Erasmus+ 2024-1-PL01-KA210-YOU-000246514

Smart Agriculture Guide for Young People

Project Report

Smart Agriculture Guide for Young People
2024-1-PL01-KA210-YOU-000246514

Coordinating Organisation:
Stowarzyszenie 'Ananda Marga w Polsce' (Poland)

Partners:
Yeşilmarmara Youth and Sports Club Association (Türkiye)
Kreatív Ifjúsági Akadémia Magyarország (Hungary)

Grant Amount (Lump Sum): 30,000.00 €

Project Duration: 12 months

Start/End Date: 01/10/2024 – 30/09/2025

Main Output:
Multilingual, interactive web platform
https://www.youthinagritech.com/

youth in AGRITECH

Project Motivation and Strategic Objectives

The project was launched to support young people amid the digital transformation (Agriculture 4.0) taking place in the agricultural sector. The project's primary motivation is to ensure that young people understand the digital transformation in the agricultural sector and acquire the knowledge and skills necessary for success in this field.

Background and Needs: Global challenges require maximising the benefits of smart farming practices. According to UN data, the world population will reach 10 billion by 2050, requiring at least 70% more production than today. On the other hand, over the last 15 years, agricultural land has decreased by 10%, and the number of farmers has decreased by 12%. Therefore, the project addresses needs such as the lack of accessible, modern and digital educational resourcesthat explain young people's disinterest in agriculture and the digitisation of the agricultural sector to young people.

Strategic Objectives

1. Closing the Knowledge Gap: Providing young people with a comprehensive guide to smart farming applications, including technologies such as IoT (Internet of Things) and data analysis.

2. Developing Digital Capacity: Equip young people and youth workers with sustainable agricultural practices, digital skills, and ecological awareness.

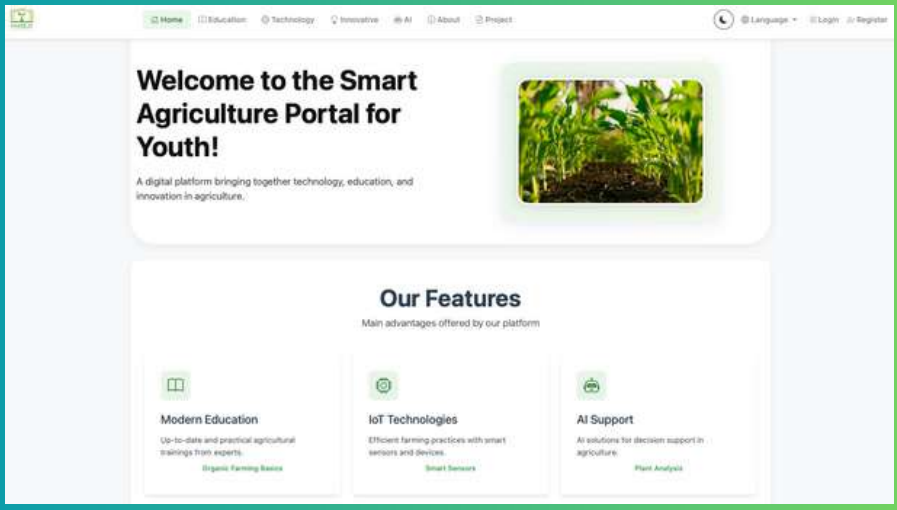
3. Promoting Employment: Increase young people's employability in the green sector by detailing the career and entrepreneurial opportunities arising from digitalisation in the agricultural sector.

4. Creating Open Access Resources: Establishing a comprehensive and interactive digital hub (https://www.youthinagritech.com/) accessible to young people 24/7.

Alignment with Erasmus+ Priorities: The project supports two key horizontal priorities of the Erasmus+ programme. **Addressing Digital Transformation through Digital Readiness and Capacity Building and Tackling Environmental and Climate Change (Green Transition).**

Main Output: Smart Agriculture Digital Guide

The most tangible and lasting output of the project is a multilingual web platform, which is a digitalised and globally accessible version of the "Smart Agriculture Guide for Young People" (https://www.youthinagritech.com) committed to in the project application.



Content and Technical

Specifications: The platform (youthinagritech.com) contains interactive e-learning modules, blog posts, and digital guides covering topics such as Agriculture 4.0, IoT usage, data analysis, and sustainable farming practices.

- **Open Access:** All educational materials are free and openly accessible. This ensures that young people in rural areas or with economic barriers can access information without geographical or economic obstacles.
- **Sustainability:** Project partners have committed to maintaining the web platform's domain name and hosting services for at least 5 years after the project's completion. Furthermore, the materials are available for download in PDF format for use in rural areas with limited internet access.

Our Target Groups

The project has a broad scope of impact. It focuses on two main target groups: young people and youth workers.

1. **Young people (aged 13-30):** Those interested in the agricultural sector, young farmers, agricultural students. The project has broken the prejudice of young people seeing agriculture as 'old-fashioned' and offered them a technological career path.

2. Youth Workers and Educators: Professionals who need up-to-date methodologies to convey the issues of climate change and technology to young people.

Other beneficiary groups include educational institutions (schools, colleges, universities), civil society organisations, local authorities and representatives of the agricultural sector.

Implementation of Activities and Project Management

The project was carried out with three transnational mobilities to produce the main output. Grant management was carried out using a lump sum approach, thereby reducing the bureaucratic burden and allowing energy to be focused directly on results.
Thanks to the Agile Management approach, flexibilities were introduced to improve the quality of the project.

1- Planning Meeting, Needs Analysis and Content Map Creation (Hungary) 31 January – 5 February 2025

A detailed needs analysis methodology was established to identify the target audience's knowledge gaps and expectations. The main module headings and content framework for the platform were created. The basic content and structure of the web platform (youthinagritech.com) were determined.

2- Development of Disseminated Training Material on Smart Agriculture (Poland) 15-20 April 2025

In line with the framework determined at the first meeting, the final version of the training modules, videos, page content and artificial intelligence analysis model were discussed according to areas of expertise. All training content (e-learning modules) to be uploaded to the web platform was updated.

3- Dissemination and Implementation (Turkey) 20-25 August 2025

The Final Dissemination and Sustainability Strategy was prepared, determining how the final outputs of the project (youthinagritech.com) would be disseminated to a wide audience. The developed training modules and platform were shared with the local target audience via . The web platform was officially launched. A pilot application feedback report was created, confirming that the materials are user-friendly and understandable. Certificates were awarded to participating youth workers and young people.

Impact, Management Quality and Sustainability

Management and Quality: The project monitoring process was carried out by the 'Project Management Team'established under the leadership of the coordinator (Ananda Marga w Polsce).

- **Communication:** Instant communication was ensured through monthly online meetings (Zoom) between partners and a constantly active WhatsApp group.
- **Output Quality:** The web platform content was cross-checked (peer-reviewed) according to each partner's area of expertise. The technical content was prepared by the Turkish partner, while the pedagogical suitability was monitored by the Hungarian partner.
- **Lump Sum Benefit:** The allocated budget of €30,000 was sufficient, and the lump sum approach ensured a focus on direct results and quality.

Impact and Future Plans

The project changed young people's perspective on agriculture, presenting it to them as a technological career path.

- **Local Impact:** In terms of dissemination in Turkey, it changed the perspective of young people and university students in Sakarya on the agricultural sector; they experienced that agriculture is not just a traditional form of production, but a prestigious career field intertwined with data analysis and digitalisation.
- **European and International Impact:** Thanks to its multilingual and open-access structure, the youthinagritech.com platform has been made available not only to young people in partner countries but also to all young people at European and international level. This output contributes to the EU's Green Deal and Digital Transformation objectives.
- **Sustainability Commitment:** The developed modules have been integrated into the regular training curricula of the partner organisations (Poland, Hungary, Turkey) at the end of the project. The Turkish partner will ensure that the platform's technical infrastructure (domain name and hosting) remains active for at least 5 years after the project's completion.

What does the project offer young people?

Agriculture is not just about soil, it's about technology: Young people are getting to know Agriculture 4.0

Farming using traditional methods is no longer rational. The current era of 'Agriculture 4.0' is transforming fields into data centres and tractors into smart machines. The aim of this revolution is to produce more, healthier and more sustainable yields using fewer resources. The technologies at the heart of our project, which we will introduce to young people, are the building blocks of this revolution.

- Internet of Things (IoT) and Sensors: Thanks to smart sensors placed in every corner of the field, we can monitor soil moisture, plant nutrient requirements, or weather conditions in real time. This allows us to know exactly when and how much water or fertiliser to give the plants.
- Data Analysis: By analysing the thousands of data points collected from these sensors, we maximise efficiency. We predict which crops will grow best where, using valuable resources like water without waste.
- Drones and Automation: Drones that monitor fields from the air, instantly detect diseases, or apply pesticides with pinpoint accuracy are no longer the stuff of science fiction films; they are the reality of agriculture. Automation shifts human labour to more efficient and strategic areas.

The sole aim of this technological transformation is not just to increase production, but also to combat climate change, reduce our carbon footprint, and build a sustainable future for our planet.

This is modern agriculture itself. So, how do we get young people into the driver's seat of this technological revolution? Let's talk about what our 'Smart Agriculture Guide for Young People' project offers young people directly.

What awaits young people? The digital heart of our project: youthinagritech.com

The most tangible and lasting outcome of our project is the digital education platform we designed for young people: https://www.youthinagritech.com/. This platform is the digitalised and globally accessible form of our 'Smart Agriculture Guide for Young People' vision.

What awaits young people on the platform:

- Interactive E-Learning Modules: Interactive videos and PDF resources that allow you to learn complex topics such as Agriculture 4.0, the Internet of Things (IoT), data analysis, and sustainable agriculture at your own pace without getting bored.
- Digital Guides and Blog Posts: A rich content archive where you can follow the latest developments in the sector and find practical information and current technologies used in agriculture.
- 24/7 Free Access: This platform is an Open Educational Resource. This means you can access this valuable treasure trove of information completely free of charge, whenever and wherever you want, without any geographical or economic barriers.

This powerful digital resource is the product of a unique collaboration that brings together the expertise of not just one team, but three different countries.

Three Countries, One Goal: Cultural and Intellectual Synergy

This project is not a random partnership. We consciously brought together three unique strengths: Poland's deep connection with nature and organic farming, Turkey's academic and technological expertise, and Hungary's genius for making complex topics interesting and enjoyable.
Poland (Ananda Marga) will teach you the fundamentals and philosophy of organic, sustainable agriculture and ecological farming practices that are in harmony with nature.
Turkey (Yeşilmarmara): You will become acquainted with the latest technologies and digital tools used in agriculture, backed by an academic foundation.
Hungary (Creative Youth Academy): You will learn technical and complex information using widespread and interactive educational methods, in a way that is enjoyable, easy to understand, and keeps you engaged.

Thanks to this synergy, we offer you a comprehensive perspective from an ecological, technological, and pedagogical standpoint, showing young people not only 'what' to do, but also "why" and 'how' to do it.
So how will all this knowledge and experience concretely reflect on young people's personal development and future? Let's clarify the investment this project will make in your future.

What Will This Project Contribute to Young People? An Investment in the Future

By participating in this project, young people will not only learn a new subject, but will also gain concrete skills that will give them a head start in the business world of the future.

1. Digital Skills for the Future: Leveraging the deep technical and academic expertise of our Turkish partner Yeşilmarmara, the fundamental knowledge you will gain in areas such as the Internet of Things (IoT), data analysis, and digital automation are skills that are sought after and valued not only in agriculture but in almost the entire modern job market. This project will equip young people with strong digital literacy skills to add to their CVs.
2. Applied Sustainability Awareness: Sustainability is no longer just a word, but a way of life and a way of doing business. Young people will learn this through the lens of our Polish partner Ananda Marga's decades of field experience in organic farming. Through our project, they will see concrete examples of how to use technology to save water, reduce their carbon footprint, and contribute to global goals such as the European Union's 'Green Deal'.
3. New Generation Career Opportunities: The 'old-fashioned' perception of the agricultural sector among young people will be completely shattered. We will ensure that young people see this field as a technology-focused and prestigious career area where data scientists, software engineers, automation specialists and sustainability consultants work. This vision will increase employability and open up brand new career opportunities for young people.

Are Young People Ready to Step into the Future of Agriculture?

This project is not just an educational programme; it invites young people to be part of a movement that shapes the future by providing solutions to a global problem. The future of food lies in the hands of technology and visionary young people. It will support young people in taking the first step to embark on this exciting journey and become one of the new generation of leaders who will feed the world.
Let's start sharing the https://www.youthinagritech.com/ platform with young people and begin building the future today!

Follow Us
Use our digital channels to access project outputs and stay up to date:

- **Website: www.youthinagritech.com**
- **Instagram: @youthinagritech**
- **LinkedIn: Youth In Agritech**

Smart Agriculture Guide for Young People

Erasmus+ 2024-1-PL01-KA210-YOU-000246514

Project Report

youth in AGRITECH

Fundacja Rozwoju Systemu Edukacji

Erasmus+
Enriching lives, opening minds.

Co-funded by the European Solidarity Corps of the European Union