

Poland

Technical Assistance

Location

Olsztyn

Programming period

2014 – 2020

Measure

M20 – Technical assistance

Funding

Total budget 13 546.25 (EUR)

EAFRD 8 619.48 (EUR)

National/Regional 4 926.77 (EUR)

Project duration

2021 – 2021

Project promoter

Regional Agricultural Advisory
Centre for the Warmińsko -
Mazurski Voivodeship in Olsztyn

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Using CAP funds to organise practical and theoretical courses in agrotronics and the computerisation of agricultural machinery.

Summary

This CAP-funded project financed practical and theoretical courses for agrotronics students in agricultural schools. They included 'hands-on' opportunities to learn about the operation of mechatronic systems used in vehicles and agricultural machines, i.e. sensors and actuators, electronics, automation or programmable controllers.



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Project Results

Established a network between potential employees and employers, as well as producers and distributors of agricultural equipment.

Improved the diagnostics, service and repair skills of 50 participants.

Increased the confidence of the participants (students of agrotronics) about future career options as the field of agriculture shifts increasingly towards automation and computerisation.

Extended subsequent training sessions to include issues related to the simulation of modern combine harvesters and network-integrated fleet management in agriculture.

Lessons & Recommendations

- ❑ Involving manufacturers and distributors of modern agricultural machines in the project established useful links between future employers and apprentices.

Context

Agriculture is transforming rapidly as new tools and technologies are introduced. The future of the sector depends upon farmers-in-training having access to the latest machinery and equipment. To address this need, the continuing professional development of agricultural training centres' staff, alongside closer collaboration with industry experts, will create the conditions for agricultural training to equip future farmers for the realities of the sector.

Objectives

The aim of this training programme was to increase the transfer of knowledge and skills to agricultural students concerning mechatronic systems for agriculture.

Activities

The project targeted adult students in agricultural schools who were specialising in agrotronics, meaning combinations of agricultural machinery and software applications. A series of two-day training courses offered hybrid combinations of theoretical knowledge and practical exercises, which familiarised participants with the latest diagnostic methods for the service and repair of modern agricultural machines and equipment.

Participants attended three introductory lectures: 'Agrotronic systems: Sequential control of hydraulic systems in agriculture'; 'Computer diagnostics of vehicles and machines'; and 'Applications, decision support systems and artificial intelligence in recognising crops and weeds'.

Three different practical workshops were also offered on: 'Teaching kit for conducting practical exercises with the use of hydraulic systems'; 'Computer diagnostics of vehicles and machines'; and 'Applications, decision support systems and artificial intelligence in recognising crops and weeds'.

In teams of eight students, the participants were able to practice using sowing machines. Each team received instructions setting out their tasks and were given time to practice and conduct three experiments. The exercises included tasks such as recognising the markings on the hydraulic units and checking their compliance with the diagram in the training manual; ensuring cooperation between the solenoid valve system and the semiconductor sensors; activation / deactivation of the steering system; etc.

Main Results

Established a network between potential employees and employers, as well as producers and distributors of agricultural equipment.

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Increased the confidence of the participants (students of agrotronics) about future career options as the field of agriculture shifts increasingly towards automation and computerisation.

Extended subsequent training sessions to include issues related to the simulation of modern combine harvesters and network-integrated fleet management in agriculture.

Key lessons

Involving manufacturers and distributors of modern agricultural machines in the project established useful links between future employers and apprentices. Young people had the chance to learn about the latest market trends and hear about employers' expectations regarding the skillsets that are expected by the sector.

Additional information

<https://wmodr.pl/informacje/3261>



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