



VERMICOMPOSTING: THE FUTURE OF SUSTAINABLE AGRICULTURE AND ORGANIC WASTE MANAGEMENT IN EUROPE



Programme: Erasmus+
Key Action: Partnerships for cooperation and exchanges of practices
Action Type: Cooperation partnerships in vocational education and training
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Project Description

The PowerWorms project aims to study, research, and verify the production techniques and specifications of vermicomposting for safe, sustainable, nutritious and healthy food production.





The project develops online educational materials and holds training activities for farmers, producers, consumers, and sector professionals.

Target Group

The project empowers the new generation of farmers and VET educators with innovative skills in organic farming. The project is ultimately targeted at apprentices (from VET Schools and HEI) and other interested individuals with an agricultural background (end users).

Persons actively develop training curricula, examination queries for agricultural vocations and VET providers in agriculture, training companies, and higher education institutions offering agricultural education are among the other target groups.

Results

Project Result 1: Educational Requirements Analysis on Vermicomposting

The primary aim of the Educational requirements analysis is to define the educational sector needs and the level of public awareness in the participating countries. The analysis starts with the educational needs assessment and proceeds with the learning needs gap analysis. The Educational toolbox's detailed design specifications are the final output of these analyses.

Project Result 2: Power WORMS Educational ToolBox and Application

Bio-composting and Vermicomposting Classroom - Manual & Guidelines are produced for students and VET school educators based on the Educational Requirements Analysis and Specifications input. The output consists of a course catalogue and handbook for trainers and trainees), educational materials, video lessons, learning activities and a virtual library, and assessment exams and certificates in English and all partner languages.

The Power WORMS Application is a practical, freeware, intelligent, innovative software for the organisation and control of bioclimatic operations developed on the Android environment for maximum dissemination. Operational parameters of the software are the type of active worm population and the geographical location of the facility so that there is a connection with the forecast of bioclimatic conditions (humidity temperature) of the user





area. The intelligent algorithm of the program schedules the maintenance work needed for the optimum bio-composting ecosystem control based on the user input. It gives practical advice according to each case.

Project Result 3: Power WORMS Online Training Course

The Online Training Course contains the training and assessment material and a virtual community space to support community interactions among learners, farmers, professors, and teaching assistants. The consortium uses the online learning for organic farming (LLOOF) platform, an interactive WWOOF Educational Platform already widely used in Europe by thousands of farmers and students.

Project Result 4: Power WORMS Promotion and Awareness Raising Campaign Strategy

The Strategy aims to provide a coherent picture of the state of the art of bio-composting and vermicomposting in farms, urban, and agro-industrial waste. It helps policymakers, VET providers, farmers, and the general public. It improves the perception of alternative farming, its benefits and the possibilities to upscale measures and gives impetus to include contents taught into the national curriculum curricula for agricultural education.

The project also includes a set of Learning Teaching Training Activities aiming to deliver a work-based learning experience to interested participants such as farmers and professionals, vocational and educational centres, and higher education institutions that offer agricultural education.

