



Piloting digital learning on agri-food business and environmental informatics in Ethiopia

ACTION BASICS

Beneficiary institution	 <p>Wollo University (WU) is a federal university founded in 2005 to extend access to quality higher education in Ethiopia. Through regular, extension, distance and continuing education, they train students to become competent professionals who can contribute to the socio-economic development of Ethiopia.</p>
Diaspora professionals	<p>A total of five diaspora professionals will be recruited to support this action:</p> <ul style="list-style-type: none"> • Dr. Ayalew Kassahun is an assistant professor at the IT Group of Wageningen University and specialises in supply chain management systems and integration. • Dr. Beshir Ali is a post-doctoral researcher at the Business Economics Group of Wageningen University, where he also holds a Ph.D. in Applied Economics and a Master in Organic Agriculture. • Dr. Seleshi Getahun Yalew is a post-doctoral researcher at the Delft University of Technology in the Netherlands, where he also holds a Ph.D. in Integrated Assessment of Land and Water Resources. • Dr. Seid Muhie Yinam is a post-doctoral researcher at the LT Group in Universität Hamburg, Germany. He holds a Ph.D. in Computer Science with his thesis in Adaptive Approaches to Natural Language Processing in Annotation and Application an active research sub-topic of Artificial Intelligence (AI). • Dr. Yonas Seifu Muanenda is an assistant professor in Emerging Digital Technologies at the Suoula Superiore Sant’Anna in Pisa, Italy.
Duration	<p>12 months</p>
Sustainable Development Goals	   

MAIN FEATURES

Context & needs	<p>Ethiopia is highly dependent on agriculture for its economy, as well as for the day-to-day subsistence of its citizens. The agricultural sector alone accounts for a third of the country’s GDP and a great majority of its total export revenues. However, despite exponential economic growth over the past decade, high levels of poverty, unemployment and underemployment remain. Vulnerable groups such as women and migrants are disproportionately impacted, including the youth, who struggle to find jobs after graduation.</p> <p>To help mitigate these challenges, WU has focused its efforts on implementing projects to better prepare graduates for the job market in key economic sectors such as agriculture. They requested support from diaspora professionals working in various agricultural and business areas in Europe to transfer their thematic knowledge and create an interdisciplinary curriculum in agri-food business and environmental informatics for WU graduates. Additionally, to increase reach and sustainability, they requested support to develop a new Learning Management System (LMS) platform to mainstream e-learning into their regular operations.</p>
Objectives	<p>General objective</p> <p>The action aims to mobilise diaspora expertise to develop the first e-curriculum on agri-food business and innovation technology at WU.</p> <p>Specific objectives</p> <ul style="list-style-type: none"> • Develop an interdisciplinary e-curriculum in agri-food business and environmental informatics. • Pilot the curriculum’s courses by delivering them to and evaluating them with WU students. • Create a customised LMS and train WU IT personnel and academic staff to use it.



ACTION PLAN

DP4D Priority sectors



Types of diaspora expertise

- Conduct of assessments, research and/or evaluations**
 - **Assessment of the current agri-business curriculum of WU** to determine areas for update and improvement
 - **Assessment of the available infrastructure and resources in WU** to develop and host an LMS
 - **Evaluation of the content of the new online courses and the newly-installed LMS** by WU academic staff and students for further refinement and customisation
- Organisation of knowledge transfer events**
 - **Training of WU's IT personnel** about the technical components of the new LMS, including its installation and maintenance
 - **Training of WU academic staff** about effective online course delivery and the usage of the new LMS
 - **Consultative workshop with key local and national stakeholders** to communicate the results of the pilot testing of online learning in WU, as well as to discuss the benefits of online learning in Ethiopia
- Development of strategic documents and/or training tools**
 - **Development of three online courses** about (1) modern agri-food business value chains, (2) programming in agriculture and environment and (3) big data analytics for agricultural and environmental management
 - **Installation and configuration of the new LMS** (based in Moodle)
 - **Pilot testing of the newly developed online courses** with WU students to determine the relevance of the content and the effectiveness of assessment methodology
 - **Development of a roadmap** to include the newly-developed online courses into WU's regular curriculum
- Visibility and communication activities**
- Facilitation of networking and partnerships**

Outputs

- **New and updated curriculum with three new online courses** on agri-food business and information technology for future generations of students at the university
- **Curriculum support documents** describing the guidelines and assessment methods for the three online courses
- **Newly-installed and customised LMS** within WU's infrastructure to host the new curriculum and future courses
- **Evaluation document** outlining the feedback from academic staff and students about the content of the new online courses and the quality of the newly-installed LMS

Expected results

- **Increased institutional capacity** of WU to use the newly-installed LMS and host online courses ensuring the effects and benefits of the platform are sustained over time
- **Increased knowledge among IT personnel** on how to install, customise and manage the LMS
- **Increased knowledge among WU academic staff** on how to effectively deliver online courses and use the LMS
- **Increased knowledge among WU students** about different topics in agri-food business

Wollo University focal point

Dr. Yohannes Gedamu Gebre (Director for Research and Publication)

yohannes.gedamu@wu.edu.et; yohadchs@gmail.com

Find out more at www.diasporafordevelopment.eu

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