

Towards Smart Agriculture by Enhancing the Knowledge base of the Future Rural Developers in Finland

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Abstract

School of Engineering and Natural Resources at the Oulu University of Applied Sciences, Oulu, Finland has two Master-level degree programmes for students who want to improve their competence on topics related to smart agriculture, digitalization, bioeconomy, and circular economy, as well as develop their strategic thinking and people management skills. The First Master programme is focused on rural development and the second Master programme concentrates on services' development management. An important part of the studies is a development project (30 credits). This article presents two cases of successful projects, which are applying new approaches to build smart agriculture in Finland.

The first case addresses the monitoring challenges of Finnish Aquaculture. Companies of aquaculture receive investment support from the public sector. The effectiveness of these investments should be systematically evaluated. In the project, a monitoring system was developed, and specific software was introduced. The second case aimed at improving data management in the context of arable crop control. In Finland, over 3500 such controls take place annually. To improve that a smart agriculture solution was suggested. It included a combination of a terrain recorder and a GPS device, and improved support applications and data set.

Keywords: Rural development, Master's degree Programme, Smart Agriculture, Services Development