RSA FARM/IT

ICT for Decision Making in Farming

Programm / Ausschreibung	Research Studios Austria, Research Studios Austria, RSA - 5. Ausschreibung 2016	**Status**	laufend
Projektstart	01.09.2017	**Projektende**	31.08.2021
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Keywords	ICT, Agriculture, Smart Farming		

Projektbeschreibung

Crop and grassland systems provide the resources necessary to support all of us with safe and sufficient food. However, the significance and pace of economic and environmental changes and threats (e.g., climate change, water scarcity, soil degradation, trade agreements) demand new approaches to efficiently support decision makers in the agricultural sector (i.e., farmers, advisors, and policy makers). Recent advances in information technologies, sensor-based plant/soil monitoring, and remote sensing have facilitated extensive data collection and processing in agricultural systems. The lack of transparent, interactive, and easy-to-understand software for data management and interpretation has widely been identified as a key limiting factor for the adoption of new technologies by stakeholders. It is evident that recent developments are lacking the involvement of farmers and other stakeholders in the setting of research priorities and for the application of research.

The Research Studio FARM/IT will address these shortcomings and provide the following contributions:
1. Establish a highly interdisciplinary, long-term research collaboration between TU and BOKU mastering recent and upcoming challenges in farming systems. The consortium aims to establish the first (academic) think tank related to smart farming in Austria.
2. Designing and developing cost-effective and user-friendly ICT components for improving the management and optimization of conventional and organic farming systems. We aim to make scientific concepts available to decision makers and to allow stakeholders to efficiently use the magnitude of data for strategic and tactical decision-making. FARM/IT will provide a web-based discussion support system that allows stakeholders to overlook the multitude of decision parameters and the high degree of uncertainty in the management of farming systems and support them in interactively evaluating the consequences of their actions in economic, environmental and political terms. We believe communication of meaningful, concise information to the stakeholders is the best way to achieve behavioural change.
3. Providing knowledge transfer and sharing between academia and stakeholders, such as farmers, agricultural companies, governmental and non-governmental organizations with the aim to lower the reservations of stakeholders towards the use of ICT. The early involvement of major stakeholders from international academia, governmental, non-governmental,

companies, software providers, and farmers, will ensure the market relevance of the research provided by FARM/IT.

Projektkoordinator

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