

eip-agri
AGRICULTURE & INNOVATION

Digitizing rural economies

Digital opportunities for primary production

Thursday 12 October



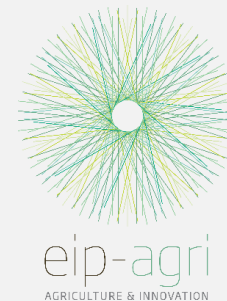
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Digitizing rural economies

Digital opportunities for primary production



Thursday 12 October

Digitizing rural
economies

- 11:00 Opening words
Quico Onega, EIP-AGRI Service Point
- 11:05 – 11:10 Introducing the session
Ana Cuadrado, DG AGRI, European Commission
- 11:10 – 11:15 Digital Extension Tools – An Irish context
Mark Gibson, Teagasc, Ireland
- 11:15 – 11:20 Aqua C+: Development of an internet-based data platform for
improvement of the water use efficiency in orchards**
Andreas Jende, Aqua C+, Germany
- 11:20 – 11:25 Introduction to the interactive session
Quico Onega, EIP-AGRI Service Point
- 11:25 – 12:00 Interactive session
Question 1: What is your experience with (policy) support to digitisation
of primary production?
Question 2: How can policy help you with what you want to do next?
- 12:00 – 12:30 Harvesting
- 12:30 End of the session
- 12:30 – 14:00 Networking lunch

AQUA C+

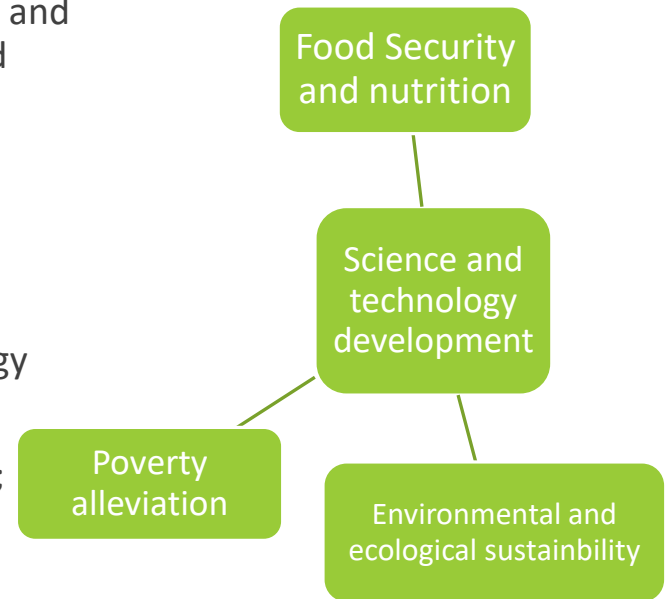
DEVELOPMENT ON A INTERNET – BASED DATA PLATFORM FOR
IMPROVEMENT OF THE WATER USE EFFICIENCY IN ORCHARDS

DR. ANDREAS JENDE

HOW TECHNOLOGIES ARE CONTRIBUTING TO MEET THE AGRICULTURE CHALLENGE

Science and technology must address (for crops, livestock, fish, and forests) various issues in order to attain higher productivity and sustainability and thereby help alleviate hunger and poverty:

- Enhancing yield and productivity, bridging yield gaps, and protecting yield gains;
- Exploiting the gene revolution (biotechnology);
- Benefiting from information and communication technology revolution and promoting knowledge-based development;
- Managing natural resources (land, water, and biodiversity);
- Addressing environmental concerns;
- Managing climate change; and Minimizing adverse impacts of natural disasters.



HOW TECHNOLOGIES ARE CONTRIBUTING TO MEET THE AGRICULTURE CHALLENGE

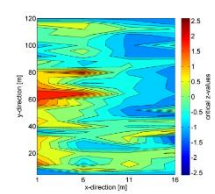
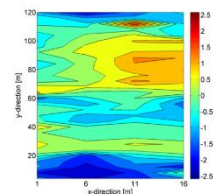
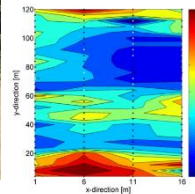
INFORMATION REVOLUTION: KNOWLEDGE-BASED DEVELOPMENT



Lesson 1: technologies must be ready-for-market

Lesson 2: partnership is critical for success

Lesson 3: policy support and market demand attract investment

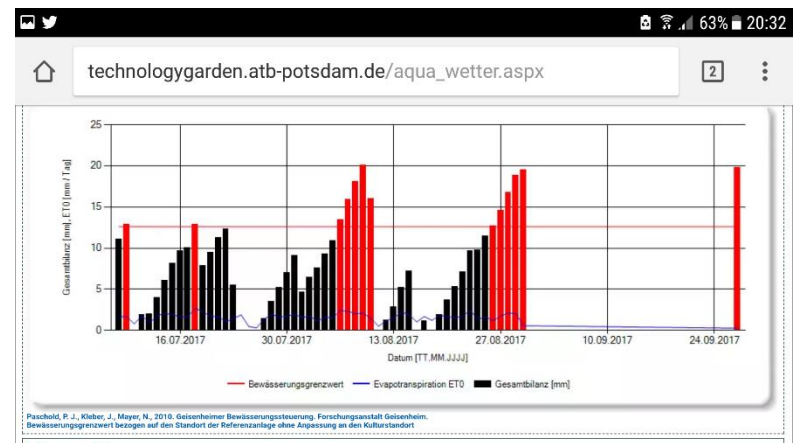


SUPPORT DIGITAL TRANSFORMATION

WEATHER STATION NETWORK:

- All partners have purchased and set up a weather station in the orchard
 - The agri-meteorological information is collected on a server
 - Programming an app for the irrigation demand after ground supply
 - constant use of information by producers and scientists at the same time
- permanent learning process for data usage and interpretation

INTUITIVE USER GUIDANCE



SUPPORT DIGITAL TRANSFORMATION

In summary ...

- Integration of other weather stations and more usable data
- Precise production control / better decision making
- Insight into new methods of determination
- Feedback science <--> practice
- A step towards horticulture 4.0



TRANSITION INTO PRACTICE



1. All Partners of the operational group are involved in all steps of the project. For instance, they support the scientific team by the soil mapping, the fruit analysis in the laboratory or they make the scoring of shrubs (bluecrop) and trees (apple, cherry) and are responsible for data delivery
2. The operational group meets regularly up to three times a year in the orchards or in the institute / personal exchange
3. During the season communication by Whatsapp
4. Responsible for data delivery by wheather stations
5. Information by internetblog www.aquacplus.de and in the newspaper of the association
6. Involving of further members of the association and networking with other scientific groups

UPTAKE OF TECHNOLOGIES BY FARMERS

- the most important requirement is the applicability in practice
- Involvement in the experiments
- Adoption of young company successors
- press releases, posters or blogs are important; more important are practical exercises and sightseeing
- involved in all steps of the project - even in the programming of end-use applications
- Long-term scientific and practical tests for more periodic consolidation



Financial Basics

Three Columns:

1. Investment promotion in connection with the project (50 % Own Contribution / 50 % EIP – Funding; max 10% total project costs)
2. Funding of administrative services (100 %); Staff costs higher → financing through the association
3. Funding of scientific work in institutes and horticulture enterprises, incl. material costs (100 %)



WHAT WORKED WELL?

WHAT IS TO IMPROVE?

WORKED WELL

1. Cooperation with scientists has given a new quality
2. young scientists in particular have their first contact with the practice
3. Inclusion of innovation brokers (but: Quality very different)
4. Structure of the funding is basically good;

..... AND WHAT HAS TO BE IMPROVE

1. the intention of the directive is not yet understood by all producers (translation needs)
2. Danger of science-driven projects (third-party funds)
3. Administrative expenses are very high → Check the flow
4. many control instances → one stop agency

Thank you for your attention





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All documents and presentations
from the EIP-AGRI breakout sessions
will be available at www.eip-agri.eu