DIGITAL ALPS CONFERENCE

Assessing the socio-economic impact of digitalisation in rural areas

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OUTLINE

- DESIRA H2020 Project
- Definition of digitalization in DESIRA project
- Asking communities how to use digital technologies in their context
- Pathways of sustainable digitalisation emerged from DESIRA Living Labs
- Lesson Learned

DESIRA Project

- DESIRA aims to **improve the capacity of society** to respond to the challenges and opportunities of digitalisation in rural areas.
- Through a network of **20 Living Labs in the European rural areas**, the project assessed the **past, current and future socio-economic impacts** of ICT-related innovation.
- DESIRA facilitated a **Rural Digitisation Forum** to discuss how policies could address the opportunities and challenges of digitalisation.
- DESIRA developed a **DESIRA Declaration**: Together for a more inclusive and sustainable rural digitalisation in Europe

Digitalization in DESIRA

Digitalization is the **process of introducing digital tools to create a new sociotechnical context** in which human activities are performed (Rijswijk et al. 2021)

Public investments are needed to address the digitalization process in each context and to observe the emergent effects that only become clear once technologies are brought into practice (Klerkx and Rose, 2020).

Digital transition in Europe

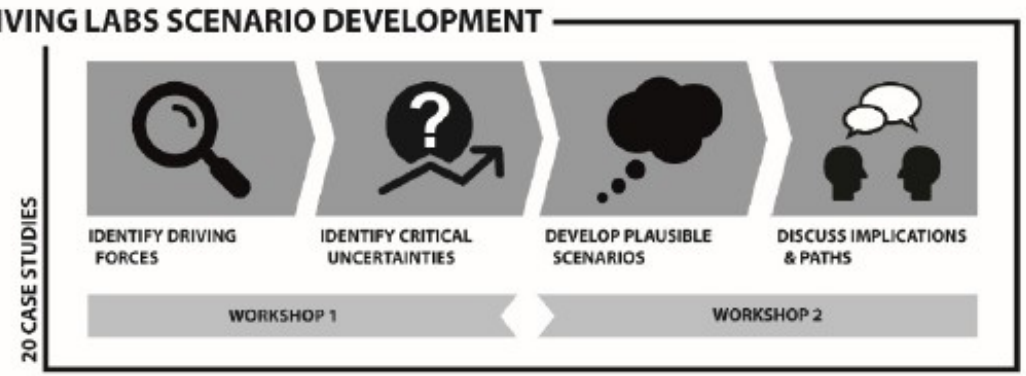
Digitalization is a **strategic priority of European Union for policies post-2020** some example are: CAP post 2020, European Green Deal, EU Circular Economy Action Plan, EU Digital strategy…

In this process it is important to consider the **needs of rural communities** and **how digitalization can support the ongoing local development process**, considering **contextual specificities** (Salemink et al. 2017).

Asking communities how to use digital technologies in their context

Living Labs in H2020 DESIRA project

- Context-sensitive findings on digitalization in agriculture, forestry and rural areas
- Analysis of past and present use of digital technologies in each context
- Consideration of winners and losers with respect to digital technologies use.
- Development of alternative digitalization scenarios identified by local stakeholders



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Pathways of sustainable digitalisation

- Living Labs have been developed in: **Greece, Italy, Spain, France, Poland, Germany, Scotland and Latvia.**
- If tailored to specific local needs, context-sensitive findings can also be generalized and **inspire possible applications of digital technologies in other rural contexts.**
- The cases presented can represent a **«palette» of digital solutions** performing complementary functions to improve rural living.

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Pathways of sustainable digitalization

AGRICULTURAL SECTOR

GR FARMERS IMPROVE THEIR POSITION IN THE VALUE CHAIN

Conversion from tobacco to leek production
Monitor of crop development, irrigation time, crop management.

LV FARMERS ENGAGE WITH CONSUMERS DIRECTLY

better services in direct trade
online shops development

SC INFORMATION ON INDIVIDUAL ANIMAL HEALTH ARE COLLECTED

quality of the production is improved
small-farmers access to expensive technologies thanks to public fundings

FR LOCAL TECHNICAL ADVICE IS IMPROVED WITH DIGITAL TOOLS

Knowledge exchange and accessibility of information
Support farmers transition to agroecology

DIGITALIZATION IN RURAL AREAS

E-GOVERNANCE

ES RISK OF WILDFIRES IS REDUCED DUE TO REAL TIME FIRE EVOLUTION MONITORING

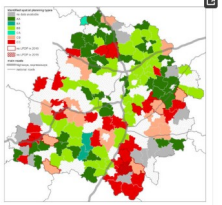
Improved human intervetion
Improved forest management policies

IT HYDROGEOLOGICAL RISK IS REDUCED

Increased efficiency of land management in mountain areas
Farmers and citizens participate to land management

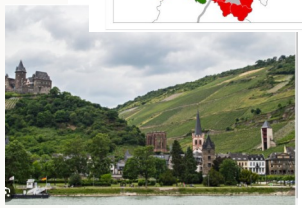
PL TRANSPARENCY OF LAND PLANNING PROCESSES

Spatial conflics among rural users are prevent
Pafrticipatory planning approaches are applied



DE ENHANCE SOCIAL COHESION

Local identification increased.
Quality and accessibility of communication increased



Digital Technologies could contribute to create social and cultural capital in rural areas facing depopulation and inequalities.

IF:

- **A co-design approach** is used to directly involve local communities in the identification of needs and problems that could be addressed with digital technologies.
- A deep observation of digital technologies implementation is carried one to identify also **unexpected effects (negative or positive)** of digitalization.

There is a need to **address the digitalization process** in critical contexts and define priorities for public investments.

Lesson Learned

How to develop sustainable digitalization pathways in rural areas

- Using a co-design approach to develop technological solutions
- Negotiation among a variety of actors is key
- Identification of priorities to invest resources on digitalization, considering also available technologies, infrastructures and skills

Possible application of digitalization in rural areas

- *E-governance*: citizens participation in public service delivery, risk management, spatial planning processes, social cohesion..
- *Agricultural sector*: farmers improving their position in the food chain, farmers engaging with consumers, local advisory services improved with digital tools use; individual animal health monitored.

Main DESIRA messages

Technology development can (and should) be steered

Sustainable digitalisation needs ad hoc rural focused strategies

Digitalisation strategies should be centred around problems

Digitalisation strategies should be coordinated with other rural policies

Thanks for your attention

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