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The role of social innovation in smart initiatives in rural Hungary

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**Creating innovation and smart solutions
for sustainable local development**

SEMINAR Tartu, Estonia, 17th to 21st September 2018

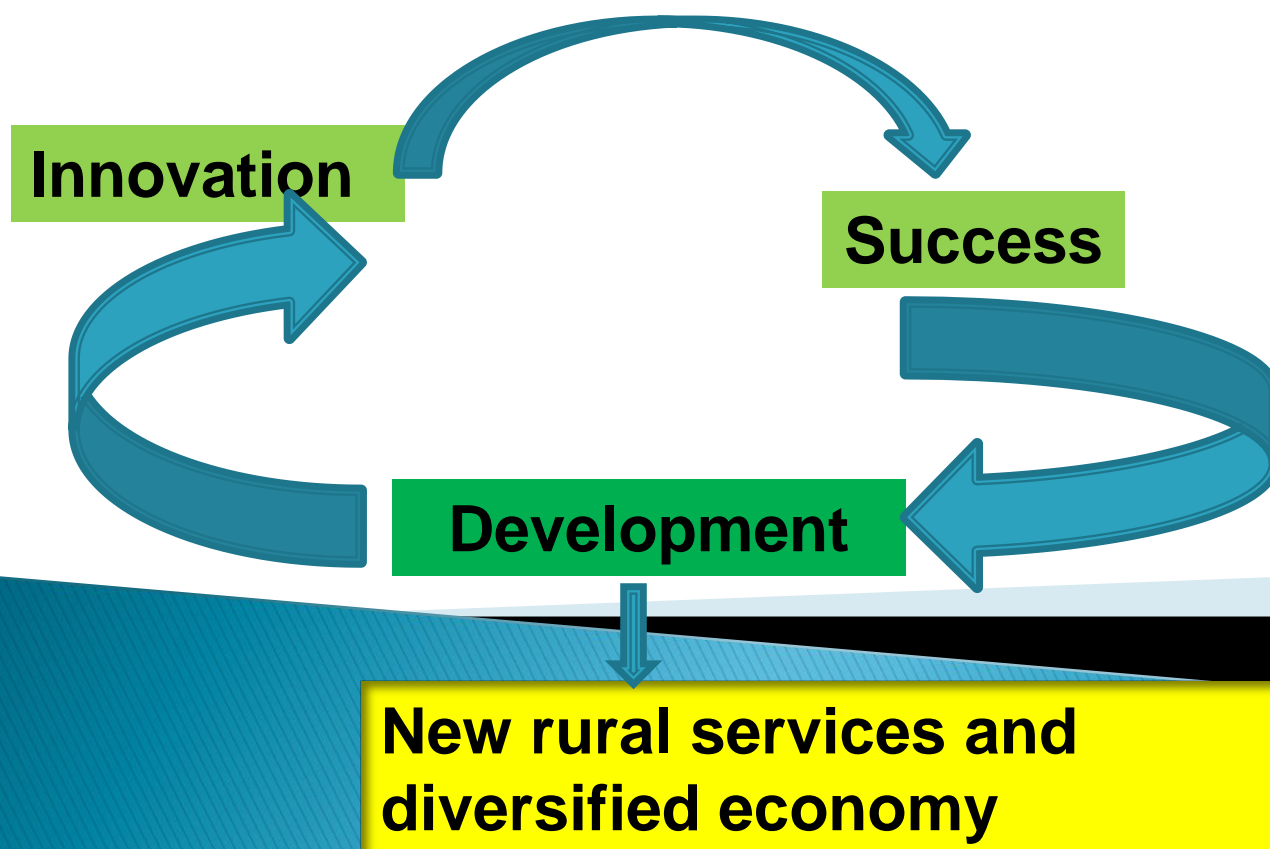


ROADMAP

1. The aim of sustainable rural development and the challenges
2. Concept of innovation of rural areas
3. Impact of innovations on each other
3. Characteristics of innovation and innovators in rural areas
4. Examples of smart initiatives from Hungary
5. Conclusion



How to improve the quality of life for rural people?



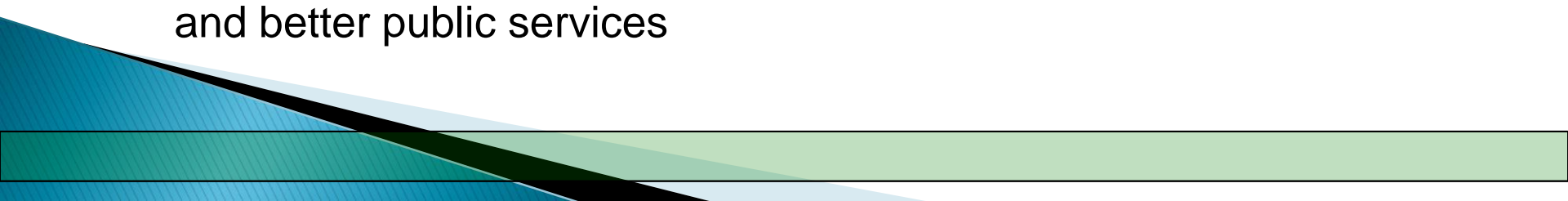
Challenges and answers for rural people

Challenges

- fast technological change
- globalization
- the role of locality
- a vague sense of new economic opportunities
- aging demographics and social problem
- changing lifestyle
- increasing demands for more and better public services

ANSWER

- INNOVATION
- SUSTAINABLE DEVELOPMENT
- COMPETITIVE RURAL SPACE
- KNOWLEDGE BASED RURAL SOCIETY
- DEMAND FOR NEW FUNCTIONS AND THEIR ACCEPTANCE





Rural innovation

It is the processes that take place in rural areas when knowledge, technology and information is made available and it is put to use in socially progressive and economically productive ways by a group of linked actors.

(R.S.Rajna, CPR, New Delhi) .



Social Innovation – „new ideas that work’

„Innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organisations whose primary purposes are social”

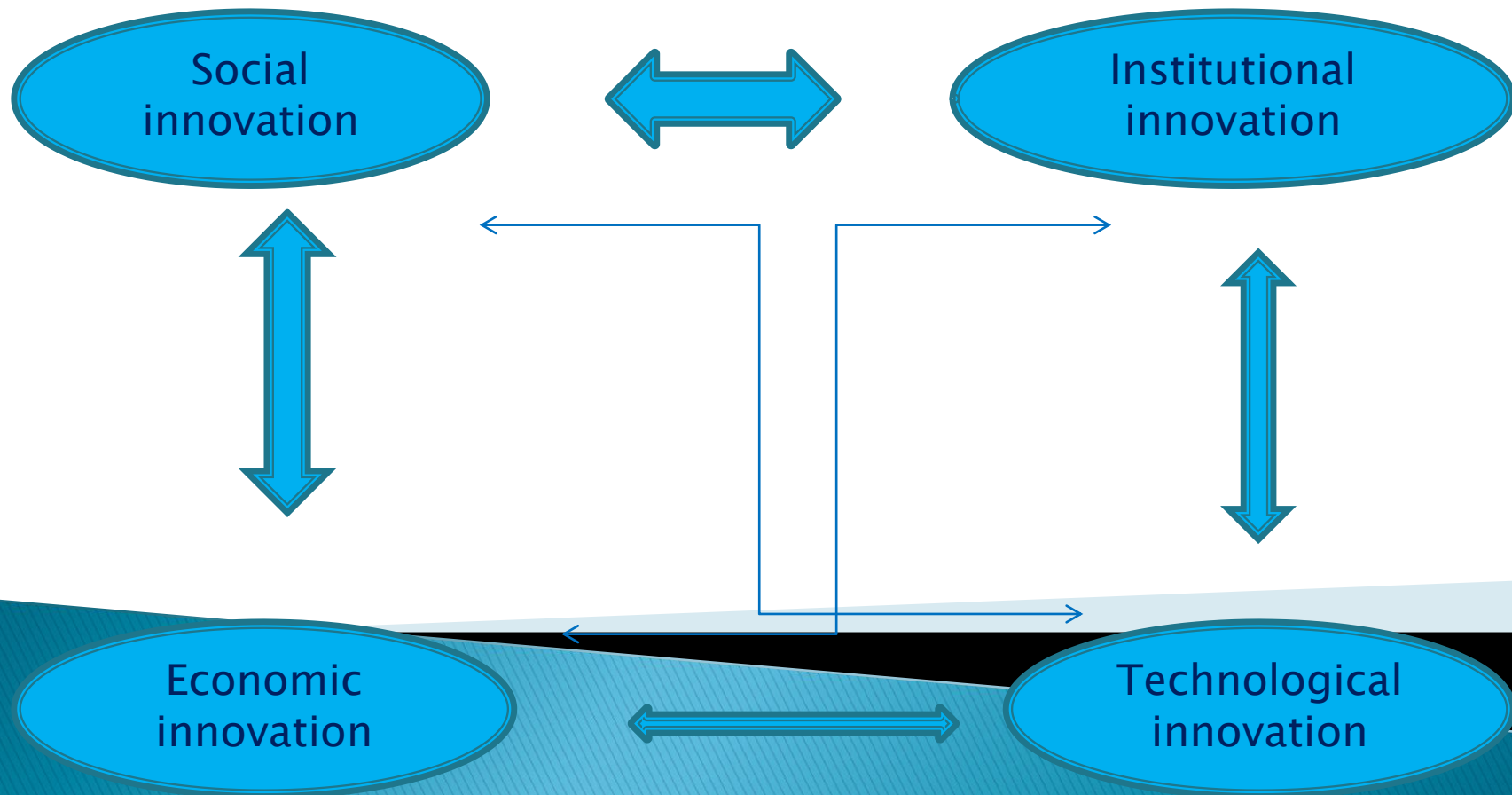
„It means: new forms, new legislations, new lifestyle which connect to social change, even advance it.

The problem solving becomes easily by social innovation and these new forms can be adapted and assist institutionalization.

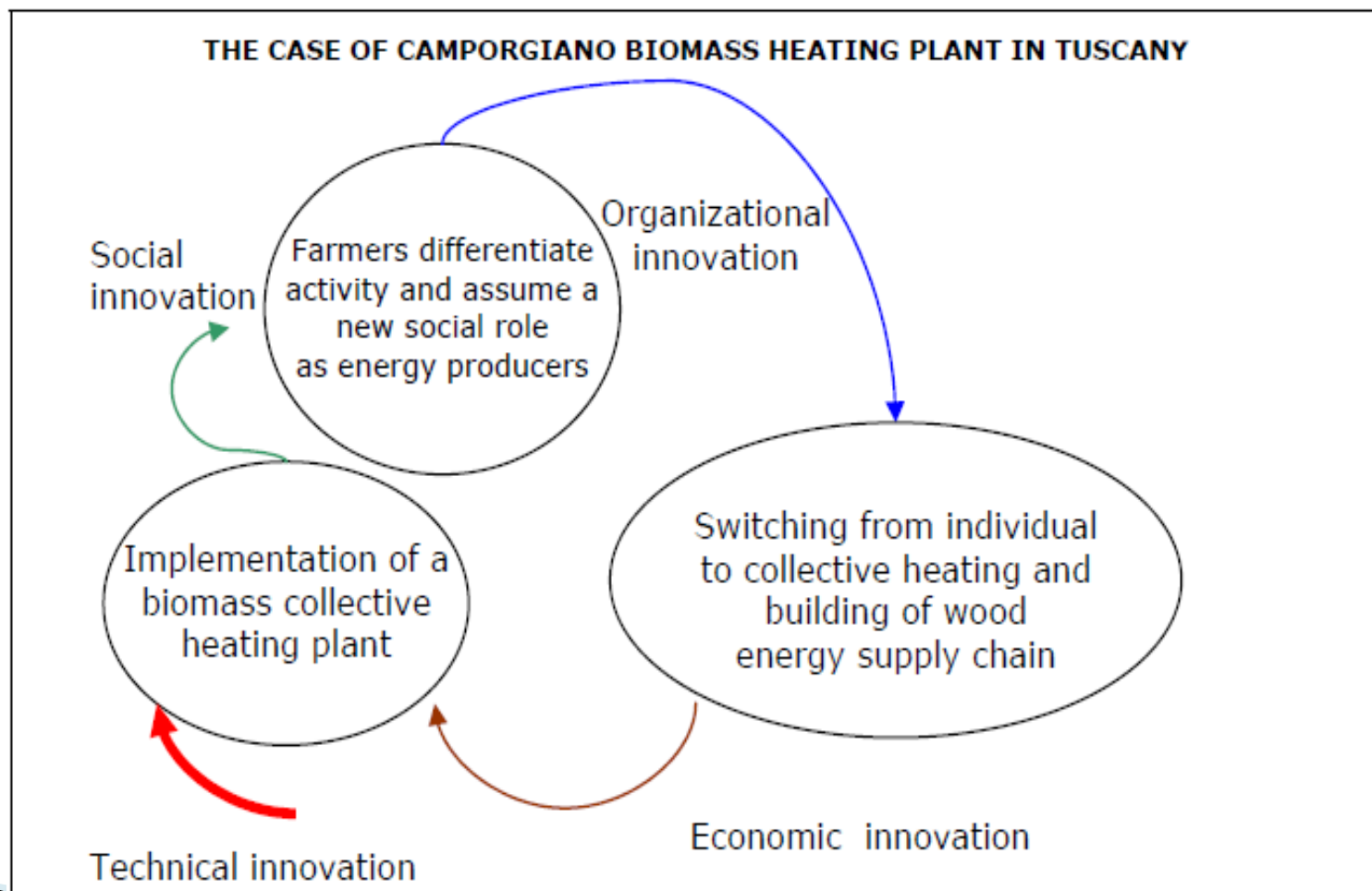
Social innovation: plays a decisive role on economic growth, can promote spread of technical and economic innovation.



Dimensions of Innovation



Connect among the dimensions of innovation





Characteristics of innovators in rural Hungary (our sample)

1. Average age of innovators: 37% between 40-49, 32% between 50-59
2. Education: 70 % higher educated
3. Gender: 80 % male

In case of social innovation: more innovators were born in an other place, but live in the examined village

In case of economic innovation: more innovators were born and live in the examined village.

What are the main characteristics of innovators in rural areas ?

Entrepreneurs

- ▶ to build the business
- ▶ to aspire to the benefit
- ▶ alert to business opportunities
- ▶ courage in business life

through the economic innovation (activity) participating and many times assuming to improve the local community

Mayors and members/leaders of NGO

- ▶ to build and improve the local community
- ▶ to encourage local people to find their own worth, to bring to light their own local knowledge
- ▶ through the social innovation they start development process

Common characteristics:

full of energy
persistence in the face of obstacles
ability to communicate a vision
key figure in the community
restless
ability to adaptation

Definition of smart initiatives

- ▶ Several different definitions (usually deriving from the term „smart city”)
- ▶ Common elements:
 - bottom-up phenomenon
 - main driver for the development is technology (ICT, engineering, digital services, etc.)
 - well-defined and measurable goals: environmental sustainability, creation of smart intellectual capital, citizens participation, well-being.
- ▶ It is smart, because it is intelligent, digital, sustainable, inclusive, democratic, etc.
- ▶ **Hungary:** relatively new concept (2014–2015); National Infocommunication Strategy; Digital National Development Programme
- ▶ 2015: Lechner Knowledge Centre – Smart City Centre (central coordinating body): to support domestic settlements in building smart strategies

Subsystems of the smart concept



Smart mobility:

sustainable transport-development, public transport, technical infrastructure, ICT tools of services



Smart environment:

sustainable natural resource management (renewable energy, water and waste management, better air quality, energy efficiency)



Smart government:

open, transparent, participatory democracy, based on ICT tools, public administration and public services



Smart economy:

services supporting innovations and businesses, ICT platforms, open data, urban labs



Smart living:

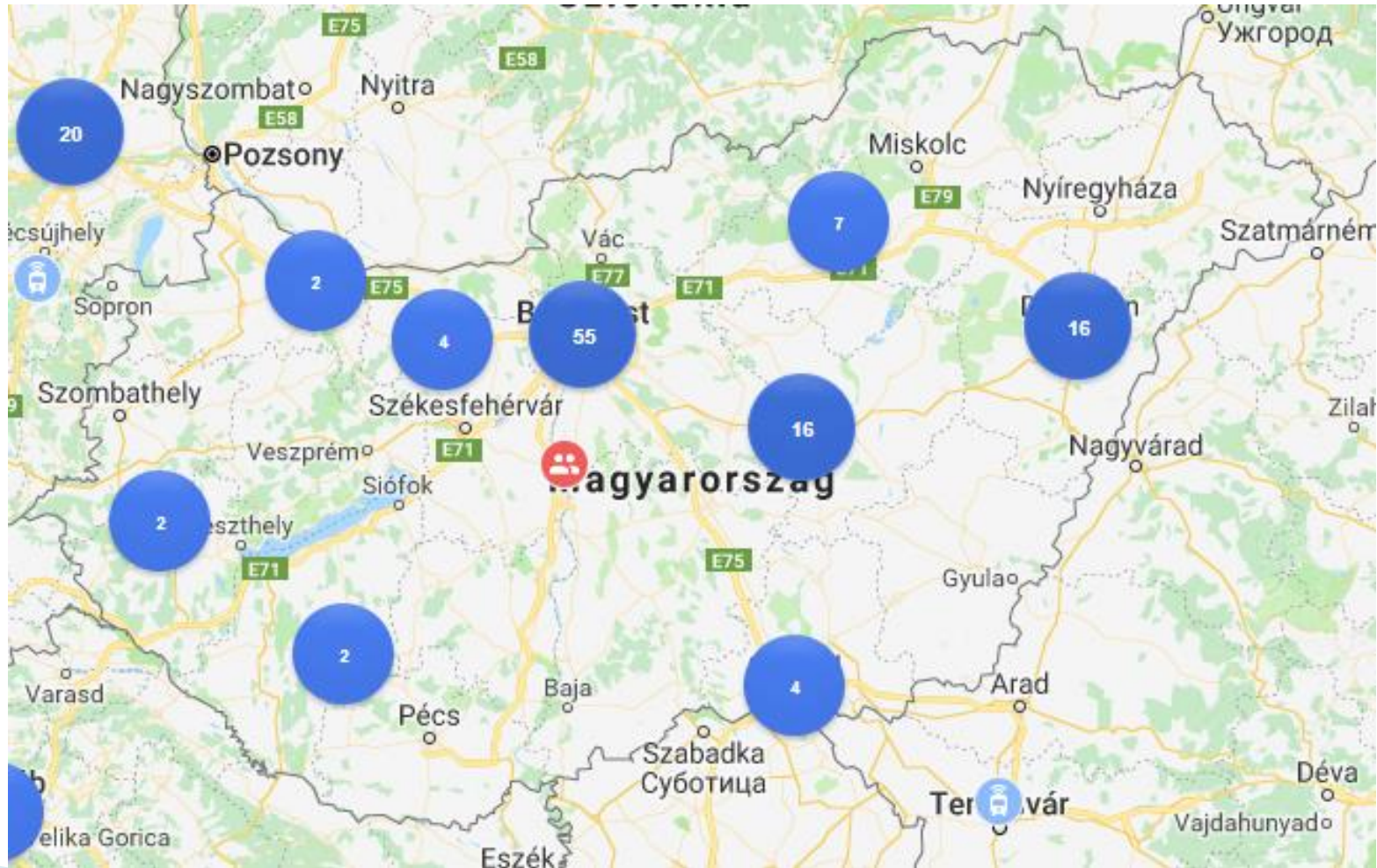
liveable city, personal security, services supporting health care, active cultural and community programs, better living conditions supported by ICT tools



Smart people:

knowledge economy, competitive labour force, lifelong learning, creative and inclusive society, educational support

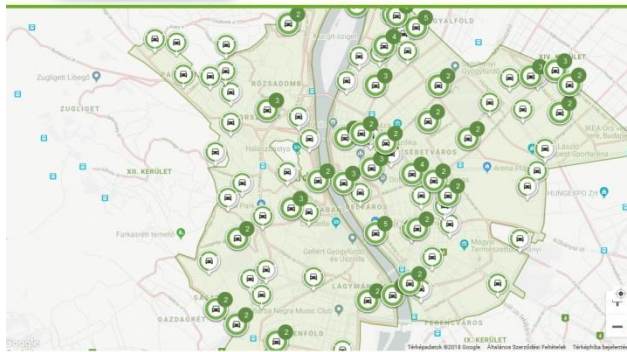
Number of smart initiatives in Hungary



Source: Lechner Knowledge Centre (2018 September)

Smart initiatives in Hungary

- ▶ According to the Lechner Knowledge Centre, there are currently 108 smart initiatives in Hungary
- ▶ However, dominant part of these initiatives are connected to the **capital or to bigger cities** (central character of Budapest)
- ▶ No wonder, since in January 2017 the Municipal Assembly of Budapest accepted the Smart City vision.
- ▶ Since then a lot of initiatives, good examples:



- ▶ *But what happens in rural Hungary?*



Smart initiatives in rural Hungary

- ▶ Considerably less number of rural smart initiatives
- ▶ „Smart village” concept: only started in 2017
- ▶ Smart Village pilot project: definition of smart villages, collecting good practices (underway)
- ▶ What is expected?
 - strengthen the competitiveness of villages, multifunctionality
 - intelligent monitoring system, passenger information, tourist applications (boosting local touristic opportunities)
 - better transport system (public/community transport)
 - better data from national and local healthcare institutions
 - smart grid energy systems, energy generating communities
- ▶ It is generally true that smart initiatives in rural Hungary are usually *started from one of the subsystems*, and slowly spread to other subsystems as well.

Example 1: Pitvaros

- ▶ *Subsystem: smart environment*
- ▶ small settlement close to the Romanian border; starter of the developments: **mayor**
- ▶ very strong renewable energy development (almost all of the public institutions are involved; private solar panel park)
- ▶ 2013: Climate Star Award
- ▶ self-sufficient attitude – good quality soil, agricultural products (utilization at the village canteen); almost 80% of the local population consumes the local products
- ▶ local population gets to know the renewable energy developments – strong awareness raising effect
- ▶ recycling (second hand clothes), sustainable mobility (bicycles for children)
- ▶ taking part in energy competitions, educational programs, giving advices, active social media use

Example 1: Pitvaros

- ▶ As a result, after the investments of the municipality, the local population also started in (small scale) renewable energy developments
- ▶ At present: huge institutional development (5 institutions in one complex (new, modern) building)
- ▶ For the future: sustainable mobility (electric cars, chargers); increasing the self-sufficiency (erythriol factory, cheese factory, buffalo ranch).



Example 2: Alsómocsolád

- ▶ *Subsystem: smart economy (tourism) + smart people*
- ▶ village is located in a disadvantaged neighbourhood – region's outstanding smart initiative (Innovation Prize in 2016)
- ▶ since 1990: lot of EU-funded development, based on new technologies („Teleház”, Boeing simulator, planetarium, mobile applications) – mostly for tourists
- ▶ „integration instead of segregation” – local government bought real estates and rented them as social houses
- ▶ community house for locals: household management, financial and job hunting advices



Example 2: Alsómocsolád

- ▶ **Settlement Network of Digital Future:** the city of Budaörs and Alsómocsolád village signed an agreement; aim: increase the receptiveness of new technologies, easier administration at the government
- ▶ **Digital (smart) village development:**
 - touristic mobil applications (hiking trails, nature trails); outdoor fairy tale games for smart phones
 - virtual tour in the village
 - conference center: scientific exhibition, experiments
 - planetarium: lectures, presentation, flight simulator
- ▶ **main aim:** to make young people stay in the village – it will only happen, if they find all the modern developments (for example well-functioning mobile internet)

Conclusion

- ▶ When examining rural smart initiatives, the role of local actors/innovators is extremely important (mayors).
- ▶ Implementing several elements of the smart subsystems is not enough – these are only *tools* to create the smart community.
- ▶ For utilizing/developing these tools – open-minded, inclusive community is needed; i.e. local people, who like, want and are able to use these tools.
- ▶ For this, social innovation is necessary – a smart community can not exist without social innovation.
- ▶ What is needed for this?
 - innovator(s)
 - active civil society/organisations/people
 - community involvement actions (time+place to bring together), learning process
 - continuous renewal (it is a process)
 - to make the local community interested in the developments – only works, if they have benefits



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Thank you for your attention!

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