DESIRA POLICY BRIEF

Geodesign in Rural Poland

«What will spatial planning in rural areas of Poland look like in the increasingly digitalised age of 2031?» was the main question approached during two interactive scenario workshops of Geodesign in Rural Poland Living Lab coordinated by the University of Lodz. This policy brief presents policy options in relation to current challenges and opportunities for rural communities in Poland in terms of spatial planning at the local level. Two most plausible scenarios discussed in details with Living Lab representatives describe the future of 2031, and in both cases, policy intervention is needed. The first, worse-but not worst („bad") «Pause scenario» assumes technological progress in terms of spatial planning but no will or skills for social participation in this process. The second, better-but not best („good") «Re-record scenario» draws a vision of rural communities ready and willing to participate in spatial planning process, however having no access to proper technological solutions. The policy options, considering both scenarios should aim at: 1) bridging the urban-rural digital gap; 2) raising local communities' awareness of participatory planning in the context of digitalisation; 3) developing new digital channels for public consultations and participatory planning; and 4) favouring digital inclusion of rural areas.

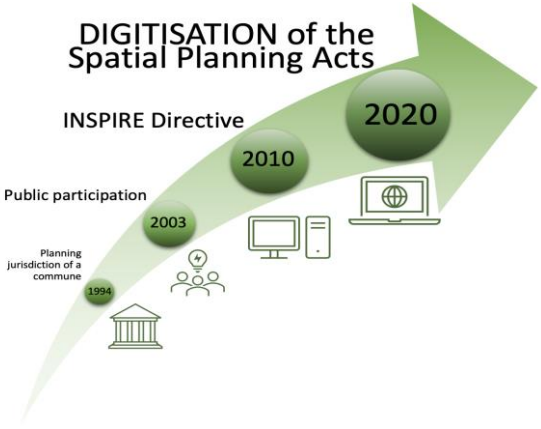
CONTEXT

Poland is one of the countries in the region that, due to its digital potential, might be considered as the European Digital Challenger. The level of digitalisation, measured by fixed broadband coverage, Network Readiness Index (RDI) or Digital Economy and Society Index (DESI) in Poland is far lower than in the case of Digital Leaders from Northern and Western Europe.

The most important problem, well visible in DESI reports, is the rural-urban divide.

Nonetheless, Poland has strong foundations to accelerate the digitalisation of its economy. There are a few areas that should and are addressed by government agencies in order for Poland to fully use its digital potential. Several policies and initiatives that have already been undertaken focus on developing digital skills and the use of digital tools by the entire Polish population, companies, and the public sector, increasing the number of ICT specialists and lifelong learning activities of employees, supporting innovations, providing legal, political, and business environment for smart (rural) development.

The development of mechanisms in spatial planning in Poland has started from new, decentralised model of spatial planning being a direct response to political and economic transitions of the country in early 1990s; through participatory approach to spatial planning inviting local communities to actively take part in land management, especially in local scale; and finally focusing on digital technologies that can be regarded as a booster of GeoDesign approach in spatial planning today.



RESEARCH APPROACH

One of the most severe challenges for rural communities in Poland is spatial planning at the local level, understood as an instrument of spatial policy implementation – one of the local government units' tasks. Until the 1990s in Poland, the system of spatial planning was based on central planning rules. Participatory planning, considering negotiations and consultations between actors representing the national, regional and local level, has only been introduced recently.

STANDARDISATION, INTEROPERABILITY, AND COMPATIBILITY OF SPATIAL DATA ENABLED PUBLIC PARTICIPATION IN PLANNING PROCESSES

Thus, we defined the following scenario question: *How to enhance participation in rural planning? And how can digitalisation improve the involvement of local communities in spatial planning processes?*

This question was approached in two interactive workshops. Scenario workshops were conducted along the event organised by the DESIRA team at the University of Lodz under the auspices of the Marshal Office (regional government). The two-day seminar, held in person, focused on innovative research in rural areas influenced by global challenges.

The finalised scenario question was: **What will spatial planning in rural areas of Poland look like in the increasingly digitalised age of 2031?**

SCENARIOS DEVELOPED

To name scenarios for future development of GeoDesign approach for spatial planning in rural areas of Poland, we used symbols of reel-to-reel audio recorder controls: Play, Pause, Re-Record and Fast-Forward. We considered possible configurations of two groups of the most influential drivers of change as discussed over the first workshop: 1) social drivers focused on level of digital literacy and will to participate in spatial planning process and 2) technological drivers covering various tools dedicated to participatory model of spatial planning, i.e. internet connectivity, platforms, apps and their usage.

Two main scenarios are: "Pause: full digital toolbox but no participation" and "Re-record: full participation but no digital toolbox". Both are plausible scenarios but describe the future where the intervention is needed. In the "Pause Scenario" the main factor will be the aging of local communities and the migration of young people. This will have a significant impact not only on the economic situation but also on the processes of adapting technological innovation. The IT infrastructure will be well developed and the digital management tools for local systems will be available. However, the problem will be the deepening dichotomy between technological development and social perceptions, as well as the willingness to accept and take advantage of the opportunities that digitisation brings.

The "Re-record Scenario" is based on the assumptions that the rural population will be stable and the IT infrastructure and digital tools will be well developed. The problem will be the technological change that will require constant adjustment not only in terms of society but also in terms of tools. Maintaining the IT base and tooling equipment will be very expensive, which will result in a very strong barrier to the further development of rural communes related to the availability of new technologies. Rural space will be a diversified space, more and more distant from the spatial pattern based on the center-periphery dichotomy. The digitalisation will be a key local game changer. Rural communes will form a spatial mosaic composed of various types of digital management.

POLICY RELATED DISCUSSION

Poland has a strong regional character, i.e. social, cultural and economic features are spatially diversified. This regional differentiation has very characteristic patterns, which in the case of the technological development shows great variation between the center and the periphery. The centers are predominantly urban in character (large cities and spheres of direct influence in the form of urban functional regions) and the peripheries are predominantly rural. Determining the basic trends leading to the consolidation of technological achievements and the transition towards universal digitalisation must consider social barriers, as well as relate to demographic issues (mainly aging) and psychological issues (mainly resistance to changes).

THE GROWING AWARENESS OF THE ESSENCE AND IMPORTANCE OF SPATIAL PLANNING IN IMPROVING THE QUALITY OF LIFE LEADS TO INTEREST IN GEODESIGN PROJECTS, WHICH INCREASES DIGITAL SKILLS

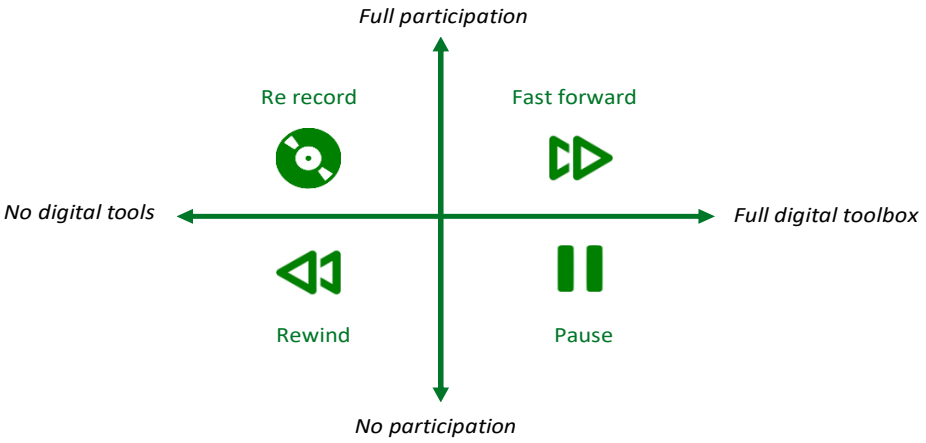
The main issue will be to accelerate the social process of adaptation to technological change by convincing local communities about the benefits of digitalisation in terms of understanding, controlling, and changing spatial development and land management.

It is expected that the social dualism may have spatial implications and turn into territorial dualism, i.e. the benefits of digitalisation will be used by well-educated communities with greater potential to act whereas highly depopulated, remote rural areas, due to the weaking social potential, may "miss their chance".

Rural communes that achieve a sufficiently high level of development will enter the path of a balanced spatial policy. Communes that do not take advantage of these opportunities will plunge into planning chaos, due to social conflicts and the lack of skills to use digital tools to solve them.

Combining new opportunities for universal and free sharing of spatial information with the involvement of local communities is a driver for the idea of GeoDesign, reflecting the "smart" approach in spatial planning and should be the goal of local authorities responsible for spatial planning on a local scale. The GeoDesign concept assumes that thanks to more integrated tools for acquiring, analysing, and visualising spatial data (also in 3D format), it is possible to design several alternative land development concepts to be assessed both by specialists and members of local communities. As a result, the project's final shape is no longer decided by the designer or a group of decision-makers but by the whole society.

Many policies and initiatives have been undertaken by both the state and private institutions in order to support the rapid digitalisation of Polish society, boosting digital literacy and tackling the digital divide. The extent to which these policies support rural regions will depend upon their implementation as rural digitalisation has so far not been a topic of concern for the government, and there is little information available on studies or policies directly addressing rural areas.



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POLICY OPTIONS

Bridging the urban-rural digital gap

- The attention should be given here to remote rural regions with the relatively slower connection speed and low access to broadband when compared with urban or sub-urban areas.

Raising the local communities' awareness of participatory planning in the context of digitalisation

- The main issue should be to accelerate the social process of adaptation to technological change by convincing local communities about the benefits of digitalisation in terms of understanding, controlling, and changing spatial development and land management.

Developing new digital channels for public consultations and participatory planning

- Until 2020, Poland had no regulation indicating the need to create GIS data for planning documents. As of October 31, 2020, new provisions require the authorities responsible for the spatial planning acts to create GIS datasets. This obligation also applies to acts already in force. Still, not many rural areas offer digital tools used in participatory planning (geo-questionnaires, geo-discussions) or engage social media in the planning process.

Favouring digital inclusion

- It is highly recommended to reframe current general policies focused on digital transformation of the country, so that they well answer needs of vulnerable groups and rural regions (especially in peripheries) supporting their digital connectivity and skills.

DESIRA POLICY BRIEF

This policy brief is published in the frame of the EU-funded DESIRA project and aims to provide recommendations for policy makers on how to support digitalisation in the context of Geodesign in Rural Poland.

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