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Participatory Approach in Land Consolidation in Poland – Crowdsourcing Application Test Feedback

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RESEARCH AIM

The presentation is based upon research carried out as part of the project entitled "Activation of the local community in rural development projects" co-financed by the European Union under the Rural Development Programme for the years 2014-2020.

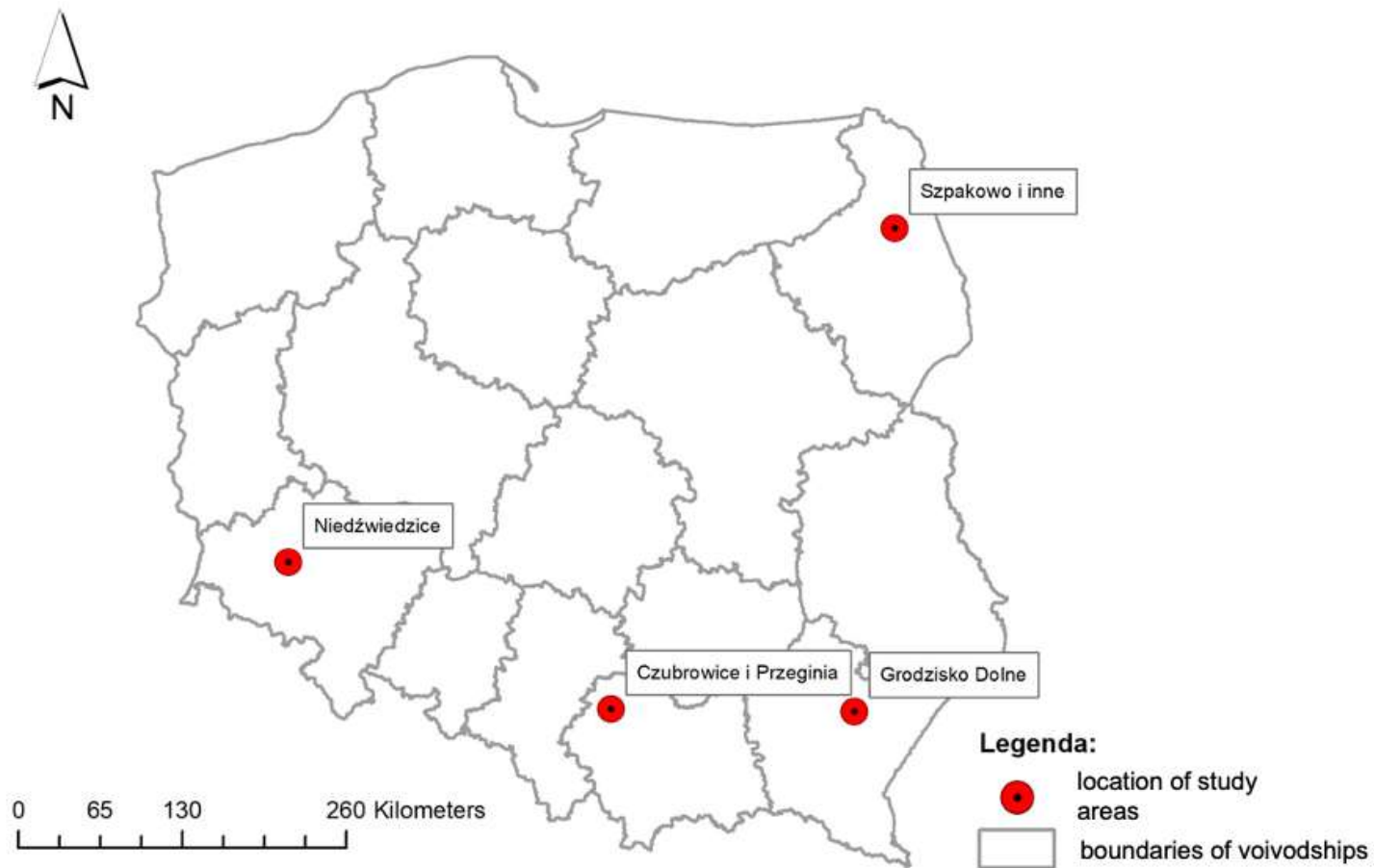
The study presents:

- new ways of engaging in dialogue with the participants of land consolidation at the early stages of consolidation works,
- experience of testing the Land Consolidation-Crowdsourcing Application (LC-CApp).

INTRODUCTION

- Modern consolidation projects in Poland require taking action to foster creativity among the members of local communities.
- Four workshops were organized in 2021. They brought together just over 40 participants, residents of areas where land consolidation was carried out.
- The participants shared their knowledge about the area as part of social research conducted as part of the study using the technique of focus group interviews and used crowdsourcing mobile application LC-CApp to introduce features onto a digital map.

STUDY AREA





EXPERIENCE FROM TESTING LC-CAPP

The development of LC-CApp was guided by two ideas:

- to involve local residents in deciding which spatial features should be taken into account when conducting rural development works,
- to acquire detailed information about the study area which cannot be found in the existing spatial databases in Poland.

The app was built using Esri's ArcGIS Survey123 software.

SET OF FEATURES ADDED TO LC-CAPP GEOSPATIAL DATABASE

LOCAL ENVIRONMENTAL CONDITIONS

- forest succession
- wetlands
- forest shading part of the field
- high slope
- high baulk
- trees shading part of the field
- solitary tree
- rocks and boulders
- other...

ROUTES OF AGRICULTURAL TRANSPORT

- trees causing visibility problem on the road
- wet roads
- frequently used dirt roads
- unused roads
- occasional journeys through adjacent land
- muddy roadside ditches
- gorge roads
- damaged road pavement
- steep descent
- other...

FARMING OBSTACLES

- land with infertile soil
- fallow land
- areas with problematic access
- areas at risk of erosion
- areas at risk of steppe formation
- areas at risk of flooding
- unfavourable slope exposure
- steep slope
- illegal landfills
- site of illegal exploitation of minerals
- other...

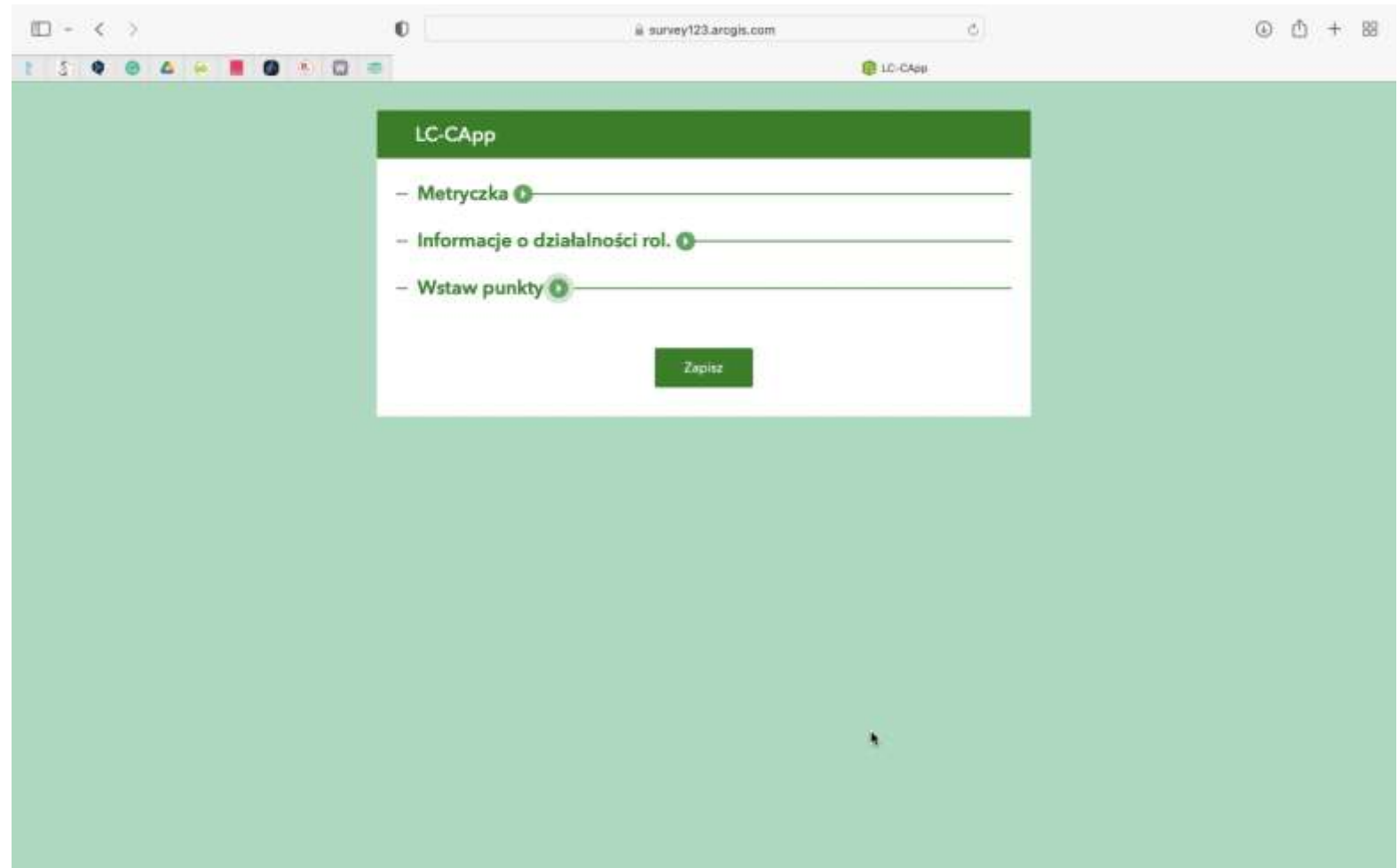
TANGIBLE CULTURAL HERITAGE

- flax-wetting wetland
- historic parcel pattern
- historic landscape pattern
- historic road
- sacred spring
- local visual orientation point
- abandoned grave or cemetery
- other...

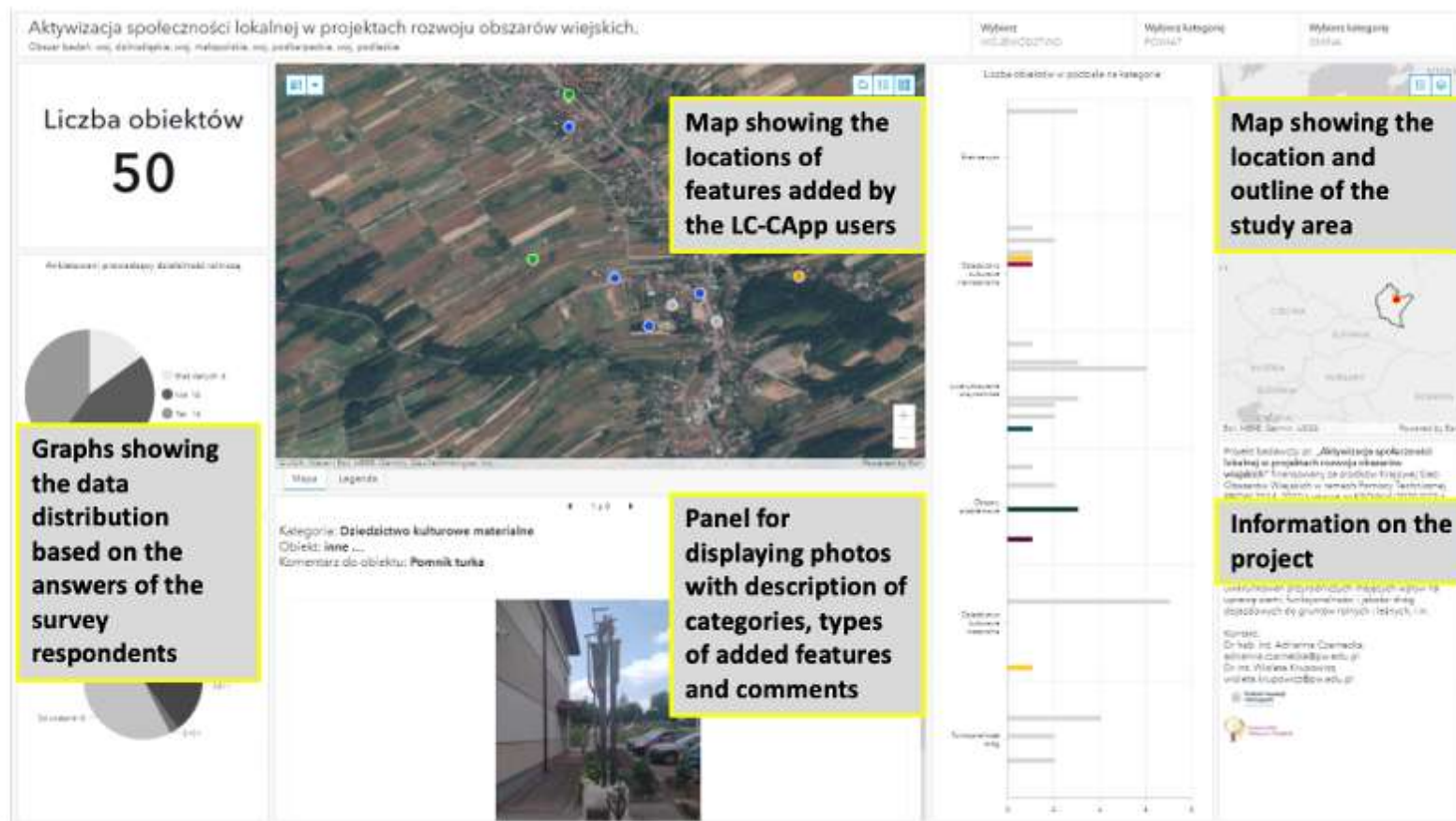
INTANGIBLE CULTURAL HERITAGE

- local legend
- way of the Cross
- ritual place
- memorial site
- location of a former mill, windmill, etc.
- other...

LC-CApp presentation



RESULTS



ArcGIS Dashboard App presenting the aggregate results of the LC-Capp testing <https://cipw.maps.arcgis.com/apps/dashboards/1f698ac36d0b4077820e8ec49aa6d05c>

CONCLUSIONS

- The data obtained from the local community allowed more accurate identification of practical, spatial, natural, cultural and landscape values of the local area for the purpose of drawing up the land consolidation plan.
- The application was positively assessed by the land surveyors involved in the consolidation planning procedure.
- Application tests demonstrated technical problems connected with poor coverage of the transmitted mobile network signal and poorer access to the Internet via phone network. It is common in some rural areas in Poland and areas of high terrain differentiation, which hinder app usability.
- The application is currently being improved and shared with interested rural development offices in Poland.

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