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Perception of spontaneous afforestation of abandoned farmland by locals and experts in Latvia

Abandonment of agricultural land and related spontaneous afforestation is a common feature of areas undergoing marginalisation process across Europe and beyond. This is also the case in Latvia, particularly in the period since 1990. The aim of the study was to assess the opinions of rural residents and land use experts about recent landscape change, the perception of spontaneous afforestation and its different spatial patterns. The study was conducted in the central part of Latvia, where about half of the area is classified as agricultural land, of which 25-35 % is abandoned.

A survey was conducted based on semi-structured face-to-face interviews with 94 residents of the study area and 23 experts. The survey included qualitative openended questions as well as questions for quantitative analysis with predefined options of answers or a preference rating along a 5 point Likert scale. The content analysis was applied to assess the answers to the qualitative open-ended questions, using the Keywords in Context technique. The quantitative data analysis was performed using MS Excel, PC-ORD 5.0 and SPSS PASW Statistics 18 software.

Answering on the open-ended question about perceived landscape changes 65% locals and 78% experts have noted land abandonment and resulting process of afforestation as the dominant trend. Most of the locals associate abandoned farmland with *inefficient use* and *desolation* (selected by 68% and 60% of respondents from the multiple choice options), followed by *apathy* (35%), *depression* (21%) and *shame* (19%). Rather few respondents (18%) view the spontaneous afforestation as natural process or even *enjoying the revival of nature* (11%).

The extended answers of the respondents indicate discomposure of locals about non-productive use of landscape. Many people consider landscape as beautiful, if it has suitable use and generating economic benefit. One respondent even pointed out that "landscape is formed through production". The evaluation of the landscape from its productivity perspective is somewhat contradictory to the observed transition from 'productivism' to 'post-productivism' and multifunctional development of rural landscape frequently referred to in the recent scientific literature (Domon, 2011; Kristensen et al., 2004; Sayadi et al., 2009). However, despite in general negative attitude towards spontaneous afforestation, many respondents have admitted that this process can be valued differently in different cases and not always it has only negative impact on landscape. When introduced with four afforestation patterns and asked to assess them in 5 point Likert scale, most of the respondents have preferred the mosaic afforestation – both with regard to impact on visual appearance of landscape as well as on biodiversity, whereas linear and continuous afforestation got the lowest rates (fig. 1).



Fig. 1 Median values and standard deviation of landscape and biodiversity value assessment of four afforestation patterns by locals and experts: AFFE – afforestation from forest edge; CA – continuous afforestation; MA – mosaic afforestation; LA – linear afforestation; scale from 1-5, where 1 – the most negative impact and 5 – the most positive impact

The high rating of the mosaic pattern, obviously based on combination of aesthetic and ethical (protection of biodiversity) values in difference to the economically driven negative attitude towards abandoned farmland and indicates a possible acceptance of the concept of multifunctional rural landscape.

References

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