Modernization of Housing Estates Towards Sustainable Development: What do Housing Estate Managers Provide, What do the Users See?

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Keywords: Housing Stock, Deep Retrofit, Sustainable Housing, Recurrent Survey.

1 Background and Objectives

Polish housing estates with prefabricated buildings, created between nineteen-sixties and nineties, are still considered a valuable asset. This is due to their generally satisfactory technical condition (Nowogońska, 2017), good location and presence of local amenities, as well as the shortage of affordable housing. However, the maintenance of these assets becomes a challenge because of the scale of the problem (buildings of this type and age are present in practically all towns and cities), complex ownership structure (obstacle in the decision-making process (Radziszewska-Zielina, 2006)), and changing regulations (promoting individual ownership of flats). The growing expectations towards energy efficiency, user safety, and comfort, accompanied by growing requirements of the building codes, make the "prefab blocks" obsolete. Therefore, keeping the buildings fit for purpose requires not only repairs, but also investment (Stevenson and Baborska-Narozny, 2017).

The aim of the research presented in this paper was: to collect input for planning improvement measures customized for a particular estate directly from the users, and to stimulate the interest of the residents in the possibilities of influencing the managers' decisions, especially regarding the current needs and corrective or improvement actions aimed at "reviving" the estates. The paper presents the methodology behind the research and discusses results obtained in three particular housing estates in Lubartów. The surveys consisted in a questionnaire-based direct interview with the residents conducted in 2010 and repeated in 2014.

2 Methods

The starting point was the selection of the object of research: an estate. After obtaining the estate management's consent to conduct the survey, a preliminary "in situ" assessment of the condition of the buildings and infrastructure was conducted and clusters of buildings representative for the estate were selected to serve as the sample. The residents of these buildings were then approached at home to provide answers to a set of questions on both renovation (R) and modernisation needs of the estate, the building and the flats. The modernisation comprises sustainability (Me) and functional (Mf) aspects. The interviews were intended to be repeated according to the same questionnaire in regular intervals. The purpose of repeating the survey was to update the insight into the modernization needs based on the opinion of the residents, and analyzing the perceived effects of the estate managers' activities. The participants of the research were limited to adults living in the blocks of flats selected as

the sample. Only one person per flat was asked to give answers. The complete questionnaire form can be found in Ostańska (2018).

3 Results and Conclusions

The residents' opinions on "urgent needs" related with maintenance and improvements to the fabric of their housing estates evolve over time (between the first survey in 2010 and the next one in 2014) and with the measures actually taken by the estate management. In particular, the repair/renovation needs seemed to be at least partly satisfied, as less people pointed to the items from this category (R). A similar number of items from the list of "modernization measures aimed at environment protection" (Me) were selected as worth implementing in 2010 and in 2014. The need for "functional modernization" (Mf) visibly increased, which may be related to the growing age of the residents and growing needs for comfort and accessibility.

The proportion between the housing cooperative's expenditures on maintenance and modernization measures does not correspond to the reported needs of the residents, especially in terms of functional modernization: in the case of the presented housing estate, no investment was done in functional modernization at all. Despite the passage of time, the actions taken by the estate management are not consistent with the expectations of the inhabitants.

The method of monitoring the residents' needs adopted in the presented research, so a direct interview, proved feasible. The results provide a valuable input on user expectations, and this input was successfully used in practice to define the scope of modernization projects in several housing estates in Lubartów. Keeping up to date with user needs, the housing estate managers are able to revise the action plans.

Though the face-to-face interview is a labor-intensive way of collecting input, both the cost and effort related with data collection and analysis proved acceptable. However, the surveys should be continued on a regular basis. To facilitate the dialog between the residents and the estate management and to streamline the data collection process in the future, it is advisable to construct an Internet platform. Its design is the current subject of the author's research.

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