

1.1 Abstract

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The research study examines parameters relevant for quality in design and planning processes for cost-effective residential buildings in Vienna. The analysis is based on the comparison of competition entries for subsidised housing projects in Vienna submitted for public housing-development competitions of the “Wohnfonds Wien” (fund for housing construction and urban renewal). The paper aims to determine parameters for architectural design and planning correlating to the buildings costs.

The aim of the study is to outline and study the coherence between criteria of quality and quantity in planning of subsidised housing projects in Vienna. In order to examine these relations the research uses methods as base data analysis and empirical observations. Main object is the focus on the four main quality criteria columns² of the “Wohnfonds Wien” as “social sustainability” and “architecture”.

The research work is based on a qualitative and quantitative analysis regarding planning criteria of selected projects for recent public housing-development competitions. Starting point are on one hand parameters for cost-effectiveness developed by the “WKO-Geschäftsstelle Bau”³ (Austrian economic chambers – sector construction) and on the other hand the „4-Collumns-Model“ for quality criteria of the „Wohnfonds Wien” (fund for housing construction and urban renewal). Thus the parameters presented in the current study refer exclusively to qualities that can be evaluated by means according to the before mentioned main criteria.

1.1.2 Object of analysis

One of the main objectives of subsidised housing projects in Vienna is the development of high-quality buildings in addition to social, architectural, ecological and economical values. Therefore the present research observes whether and to which extent which qualities are key factors for rising costs (“cost-pushers”). In order to analyse and outline these cost-relevant

¹ Wohnfonds_wien: Liegenschaftsmanagement. URL: <http://www.wohnfonds.wien.at>, 12.11.2012.

² Vgl. ebd.

³ Vgl. A. Kolbitsch, u.a., *Studie über Wirtschaftlichkeitsparameter und einen ökonomischen Planungsfaktor für geförderte Wohnbauprojekte in Wien*. Institut für Hochbau und Technologie und Institut für interdisziplinäres Bauprozessmanagement der TU Wien, Wien 2008.

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design and planning parameters, the research emphasizes on crucial connections between quality and quantity criteria for subsidised housing projects in Vienna.

The aim is to demonstrate those severities and correlations in the „design- and planning-parameters for cost-effective housing“.

1.1.3 Procedure

The analysis method is based on the correlation of qualitative and quantitative parameters.

In order to ensure a standardised analysis, in a first step the projects relevant characteristics were presented. The study is based on a first general analysis of the selected competition entries. The basic project data was provided by the „Wohnfonds Wien“, further necessary data was supplied by the developers and architects responsible for the respective projects. In a second step all projects were anonymised. As one important target of the survey defines the applicability of its results, the authors focused on a simplified approach to data provision. In this step first results showed that some relevant data was not possible to extract from the material submitted for the public housing-development competitions. The inclusion of this unavailable data could undergo further examination for future modifications.

After the general data collection the parameters for cost-effectiveness („WKO-Geschäftsstelle Bau“) were applied to determine a cost-profile whereas the „4-Collumns-Model“ („Wohnfonds Wien“) were used to defined a set of quality parameters to present a quality-profile. Based on those parameters 20 submitted projects (two were exclude from the research later, due to lack of base data) were analyzed. Thus it became possible to work out a cost-profile as well as quality-profile for each project. Besides the appropriate building costs of the projects were compared to the results. In the last step of analysis the qualitative and quantitative profiles are being compared to each other in order to place each criterion of quality in relation to its economical relevance.

1.1.4 Results

In summary the economical parameters of the “WKO-Geschäftsstelle Bau” are applicable to control building costs in planning. On the other hand some essential quality criteria, such as “qualities of outdoor spaces” or “qualities of urban spaces” are not part of the WKO parameters cost analysis and therefore an inclusion of these factors should undergo further examination. The integration and analysis of those kinds of qualities could constitute the fundament of further research referring to the relation of quality and cost in subsidised housing.

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Thus the fact that some characteristics of residential housing that are thoroughly relevant for building costs are not part of the economical parameters of this research should not be left unmentioned. These include particularly qualities as the “appearance of a building”, “materials” or “comfort”. Those long-lasting characteristics should undergo further examination.

Further it can be outlined that a significant amount of costs is being controlled by planning external factors and therefore is not applicable and regulated in planning (funding, etc. ...).

Concerning quality criteria a first result is that the essential qualitative parameters for design and planning are entirely included in the “4-Columns-Model” of the “Wohnfonds Wien”. But only a part of these criteria is significantly relevant for construction costs. Therefore the integration of “traditional” qualities in planning public housing projects in Vienna should be realizable even if the project is underlying cost pressure. To consider the three main cost factors - “economical floor plans and infrastructure”, “compact buildings” and the “support structure” - is a crucial premise for this assumption. Moreover it is advisable to observe several smaller cost factors mentioned in the present study.

Taking into account that the economical parameters should be applicable in practice, it should be mentioned that some essential data like the total gross floor area, the total cubic capacity or the total surface area could not easily be obtained. Therefore an inclusion of this data within the submitted documents that are handed in for the public housing-development competitions at the “Wohnfonds Wien” should be taken into consideration to ensure a simplified determination of a project’s profitability.