mag.^a C. Angelmaier, 2009

Social Sustainability in Residential Building –

An Investigation of Pilot Projects, (successful) Examples and New Approaches.

ABSTRACT

Till now residential building projects in Vienna have mainly focussed on the ecological and economic criteria of sustainability. The current suggestion is to re-introduce the aspect of 'social sustainability', although it remains unclear, exactly what is to be understood by it.

The research project "Social Sustainability in Residential Building - An Investigation of Pilot Projects, (successful) Examples and New Approaches" attempts to find a definition, and investigates the planning, building and utilization phases of residential buildings, for any resulting socially sustainable objectives. At the same time the research focuses on the implementation of the objectives and the experiences of residents and residential building projects. For this, evaluations of pilot projects and residential buildings with social objectives were used. The experiences of the occupants are indicators that can be used to measure social sustainability.

Social sustainability is a topic of great relevance that extends throughout the life cycle of a building as well as through its organisation and the living process itself. I have thus carried out the investigation in four fields: · Planning Aspects

- Construction Aspects (apartment, residential building, renovation / re-development)
- · Aspects of the Utilization Phase (participation, partial self-management)
- Property Management (social management, renovation / re-development)

Additionally the research project is structured in three parts: part one discusses the above mentioned fields in a theoretical context on the basis of existing examples; in the second section interviews will be made with various people on the theme of "ideal living" (the focus is on conversations with young people from the age of 11); the third section shows residential projects, dating back to 1991, from Germany, Switzerland and Austria, that have social sustainability as starting points.

Fields that already offer many up to date research contributions (age-aware residences; dwellings for migrants; free space) are only touched upon in this investigation. The question of affordability, one of the basic elements of social sustainability, could not separately be taken into account because of its extensiveness but is integrated as a point of departure into all of the research.

> Social Sustainability in Residential Building

For the definition of social sustainability I refer to the analysis provided by Claudia Empacher and Peter Wehling¹ from the Institute for Social-Ecological Research (ISOE) in Frankfurt/Main adding, especially for residential building, the criteria of its suitability for everyday use.

The analysis of Empacher / Wehling describes 5 core elements: long-term maintenance of a secure existence for everyone, preservation and further development of social resources, equal opportunities regarding access to resources and participation. The fifth element "that suffuses all the others, is the conservation of the ability to develop and designate social processes and structures."²

Claudia Empacher, Peter Wehling: Soziale Nachhaltigkeit. Perspektiven der Konkretisierung und Operationalisierung (Hg.: Institut f. sozial-ökologische Forschung) Frankfurt/Main 1998, http://www.isoe.de/projekte/sozdim.htm ² Ibid., http://www.isoe.de/projekte/sozdim.htm

The adaptability of existing structures (built, but, concerning the living process, mainly the organisational structures) is for me crucial in achieving social sustainability in residential projects. "The aim of sustainability cannot lie in the maintenance of existing structures alone, but rather systems need to be able to respond flexibly to changes within the system or the environment if they want to exist long-term."³ In this respect the consideration of social sustainability in residential building cannot only aim to improve the homes of those concerned. It can also be deployed to make (social) housing more effective and enable it to react flexibly to changes within the buildings and the society.

> Planning Aspects

The investigation has shown that for a successful implementation of the aims of social sustainability they have to influence the planning stage from very early on. Not as a concrete architectonic plan, but rather as an accurate and cross-linked planning process. "Mistakes" that have their origin in the planning, can only be corrected later on with great difficulty and at great costs, or not at all (e.g. the location).

> Construction Aspects

For structural planning the suitability for daily use is the most important criterion. For this it makes sense to consider the daily actions of the inhabitants and the conditions of their daily life.

Flexible and variable use spaces provided by the architecture are able to adapt to the different needs of the various inhabitants and are consistent with the idea of living as a process and the multiplicity of living modes. At the same time there is often little to no attention paid to spaces such as halls, storage, transitions – public or private, and the question of sufficient sound insulation. Noise, for instance, (traffic, but the noise of the neighbourhood or nearby industry is equally important) is one of the main difficulties for housing and has concrete consequences for the health of those affected.

What's become clearly evident is, on the one hand, a greater desire for the possibility of retreat and for privacy – also within an individual's accommodation – on the other hand there is the desire for a feeling of neighbourhood and communication. It comes as no surprise that a functioning neighbourhood network is considered to be crucial by those that depend on it in their daily life (children, families, single parents and the elderly). As well as architectonic aspects, the research project investigates, above all, the communicative function of transition zones between private and public, the circulation areas of a residential building, and existing real and virtual community spaces.

> Aspects of the Utilization Phase

The investigation shows that, above all, the possibility of inhabitants for codetermination during the phase of utilization is crucial for the aims of social sustainability. Codetermination, responsibility, and the implementation of independent activities are important criteria for social sustainability.

It has also become clear, that they do not occur without conflict, are not (and cannot be) supported by all inhabitants to the same extent, and are not predictable. In any case, clear structures of competence, flexibility on the part of all those involved, and a certain amount of pragmatism and patience are required. High expectations become hindrances. This might be valid for social sustainability in general, but the researched evaluations of pilot projects also mention that the process of collectively dealing with and finding solutions for conflicts can already have a socially sustainable function in itself.

³ Ibid., http://www.isoe.de/projekte/sozdim.htm

> Role of the Property and Facility Management

Property management will play a crucial part in relation to social sustainability in housing. Their readiness to leave behind the classical responsibilities of management and to take over "social management" is one of the prerequisites.

In my opinion, this is not about the obvious aspect of additional assistance. It is first of all about a mutual exchange of information, to enable versatility in the living process as well as within the management. According to Empacher/Wehling, the fifth core element of social sustainability, the ability of social systems to develop, is the decisive factor.

Fields known as living-related services, including assisted living for elderly and special needs persons, facilities that enhance the neighbourhood, support for the activities and initiatives of tenants, and social management in difficult situations only come second. Above all a great chance lies in including the relevant parties themselves.

> Findings

According to this research project, the key aspects for successfully implementing social sustainability in housing lie in exercising due care, pragmatism and patience.

- Due care in all areas of planning and selection of materials, taking into consideration the concrete difficulties of living (such as; lack of storage space, noise, lack of protection against heat and wind etc.)
- Pragmatism; in the long run social sustainability cannot be an action of 'good-will', but rather has to take into account the energy, time and financial resources of all persons and businesses involved. Pragmatism is also important in the realisation that solutions, which consider as many factors as possible, have proven themselves more enduring.
- Patience is necessary when realising socially sustainable objectives. The investigation shows that in practise, successes are not immediately evident. Even successes that have already been achieved might have to be adjusted to changing conditions. Here, the advantages of planning with due care and foresight become evident.

> Future Prospects

Social sustainability is a new aspect in relation to residential building. It complements and permeates the existing aspects of economic and ecological sustainability. This research project tries to substantiate the issue, its contribution to the quality of living conditions as well as its possible limitations.

For future research in this direction, and for further in-depth investigation the following fields are worth mentioning:

- · costs of the complete life cycle of a residential building
- \cdot young people and housing
- · redevelopment and reconstruction of residential buildings and complexes from the 1950's to the 1980's.