

**СОЦИАЛЬНО-ЭКОНОМИЧЕСКИЕ АСПЕКТЫ СОХРАНЕНИЯ,
РЕКОНСТРУКЦИИ И МОДЕРНИЗАЦИИ ЖИЛИЩНОГО ФОНДА**

**SOCIO-ECONOMIC ASPECTS OF THE CONSERVATION,
RECONSTRUCTION AND MODERNIZATION OF THE HOUSING STOCK**

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Аннотация: Статья посвящена актуальной на сегодняшний день проблеме реконструкции старых зданий в градостроительной практике, детальному анализу настоящего состояния жилого фонда. Предложены общие и практические рекомендации по реконструкции жилых зданий.

Annotation: The paper is devoted to the present day actual problem, to the detailed analysis of the present state of the housing resources. General and practical recommendations on reconstruction of buildings according the criteria of energy and resource efficiency and seismic stability of residential buildings have been proposed by the authors.

Ключевые слова: землетрясение, сейсмостойкость, жилые дома, архитектурно-градостроительные требования, эколого-социально-экономические требования, антисейсмические мероприятия, реконструкция.

Key words: earthquake, seismic resistance, residential buildings, architectural-town-planning requirements, environmental-social-economic requirements, antiseismic measures, reconstruction.

Preparation of population for the consequences of earthquakes, as well as provision the strength, seismic resistance, safety and reliability of buildings and structures, is one of the most important areas of the national economy [1,4].

Do residential buildings constructed according to the old regulatory requirements and “typical” projects of the current KMK 2.01.03-96 “Construction of seismic areas” [2] and KMK 2.01.04-97 “Construction heat engineering” [3] answer them? The number of such buildings in the Republic Uzbekistan is 32,4 thousand, of which 55% are large-panel houses.

Every day, buildings with a service life of 40 years or more are increasing. There are also buildings constructed according to “standard” projects, in which illegal changes have been made, and they do not pass on modern architectural-town-planning and environmental-social-economic requirements. This reduces the structural safety of these buildings and the probability of accidents increases [5].

So far, it has been widely believed that high-rise buildings are cheaper to demolish than modernize them and meet modern energy efficiency requirements. However, the experience of the reconstruction of residential buildings in Europe, and for example in such countries as Germany and France, completely refuted such judgments. None of the buildings had a need for demolish for technical reasons [5].

A kind of urban renovation began In Uzbekistan.

To begin with, we studied the renovation of cities in China, Germany and Brazil in particular, the experience of Russia [6].

For example, in Beijing, renovation was carried out in whole quarters, where most of the buildings were considered dilapidated. Initially, a study was conducted that that renovations require premises with a total area of 16.12 million square meters. At the first stage of the program, which was divided into four stages, quarters were reconstructed. The renovation program created the conditions for the renewal of infrastructure and the construction of commercial real estate in the central districts of Beijing. In addition, the living conditions of the poor local people have improved significantly [6].

Also in Brazil in 2009, it was decided to implement a program for the mass construction of affordable housing. It was named Minha Casa, Minha Vida (“My Home, My Life”). The meaning of the program was to provide low-income groups with preferential interest rates for purchasing housing in new homes [6].

Taking into account the above, it is required to continue studying the experience of “rehabilitation” and “renovation” also considering the climate and conditions of Uzbekistan [5,6]. These issues are related to the housing sector economy, since the main consumer up of energy to 40 percent or more are buildings and structures of this fund [1].

Table 1

Score	Damage from earthquakes in buildings built without antiseismic measures, from initial cost, % да.	Losses from earthquakes during anti-seismic events designed for points %			Losses prevented by anti-seismic measures designed for points (%)		
		7	8	9	7	8	9
7	14	6	5	4	8	9	10
8	32	-	12	8	-	20	24
9	103	-	-	22	-	-	81

The following table shows how great national economic importance is the correct use of anti-seismic measures and their strict implementation in the construction of buildings and the desire to reduce the specified cost of construction while ensuring the seismic resistance of buildings [7].

From the above, the following suggestions can be made:

1. Correct assessment of the technical condition - increases the constructive safety of buildings and reduces the probability of accidents reduces operating costs;
2. With the ensuring of modern requirements for energy efficiency of buildings, we can:
 - update or save the existing fund;
 - if necessary, you can add or attach or increase the volume, or attach the attic floor during the reconstruction of the building;

- the cost of upgrading homes will be around 30% of the cost of newly built new housing;
- work without relocation of residents.

BIBLIOGRAPHICAL LIST

1. Ўзбекистон Республикаси Президенти Ш.М. Мирзиёевнинг 2017 йил 24 апрелдаги “[2017 - 2021 йилларда кўп хонадонли ўй-жой фондини сақлаш ва ундан фойдаланиш тизимини янада такомиллаштириш чора-тадбирлари тўғрисида](#)”ги ПҚ-2922-сонли **Қарори** (*Ўзбекистон Республикаси қонун ҳужжат. тўплами, 2017 й., 18-сон, 319-модда*)

2. ҚМҚ 2.01.03-96. Зилзилавий ҳудудларда қурилиш. Қурилиш меъёрлари ва қоидалари / Тошкент: Ўзбекистон Республикаси Давлат архитектура ва қурилиш қўмитаси. - 1996.–175 б. –Тит. В. матн парал. ўзбек ва рус тилларида.

3. ҚМҚ 2.01.04-97*. Қурилиш иссиқлик техникаси. Қурилиш меъёрлари ва қоидалари / Тошкент: Ўзбекистон Республикаси Давлат архитектура ва қурилиш қўмитаси. - 2011.–55 б. –Тит. В. матн ўзбек тилида.

4. Убайдуллоев М.Н. Убайдуллоев О., Убайдуллоева Н., Убайдуллоев О. Реконструкция талаб биноларнинг энергия самарадорлиги ва зилзилабардошлигини ошириш масалалари (Самарқанд шаҳри мисолида) [Матн]// Илмий-техник журнал-Ме'morchilik va qurilish muammolari, №1(2016),SamDAQI-Samarqand,2016.В.63-67. Bibli: б.-67.

5. Коваль С.П. Реконструкция и модернизация (санация) жилых домов в Восточной Германии. Полезный опыт для России [Текст] / С.П. Коваль - <http://portal-energo.ru/articles/details/id/121>.

6. <https://kun.uz/ru/news/2019/04/16/kak-v-mire-reshali-problemu-ustarevshego-jilya-i-snosa>

7. Курмаев А.М. Сейсмостойкие конструкции зданий. Справочник.- Кишинев, Картя Молдовеняскэ, 1989 г., 453 с.