EXCELLENCIA
INTERNATIONAL MULTI-DISCIPLINARY JOURNAL OF EDUCATION
Volume 02, Issue 05, 2024 ISSN (E): 2994-9521

Development Problems and Proposals of Future Cities in the Republic of Uzbekistan

Abdurahmonov Adhamjon Sultonboyevich [1]

[1] Senior, Namangan Engineering-Construction Institute

Abstract:

In the article, the future cities of Uzbekistan, the demographic growth of the population, taking into account the demands of the population, climate changes and the problems that are expected to arise in this process, the role of people in their solutions are analyzed and suggestions are made.

Keywords: "Green city", "smart city", developing cities, cities of the future, development, environmental cleanliness, proposals.

Introduction. In recent years, the processes taking place in the world have changed the way of life of many cities in different countries. Governments began to use the previously used widths in a new way after the cars became less. There was a need for a safe distance between people. In some streets, the movement of cars was prohibited, and the areas freed from cars began to be given to pedestrians. People are consciously trying to create a safe and comfortable urban area. Artyom Kitaev, a well-known Russian architect working in the field of modern urban planning, shared his thoughts on future cities. So what features and amenities will the cities of the future have? So, according to Artyom Kitaev, the amenities of cities are: Optimal: in the evening, the parking lot turns into a children's playground, home and office are in one place. Comfortable: public spaces are built where cities can easily compete with each other in terms of creating good conditions for people. Safe: strict digital control for citizens and fines for any violation. (Today's digital control, cameras will be more and more rational.) Environmentally friendly: self-sufficient electricity house, orderly streets will be built, cars will be less, rivers can be freely bathed.

The cities of Uzbekistan can have the facilities mentioned above in the future, only for this it is necessary to change the way of thinking and habits of the population. First of all, it is important to educate environmental ethics, public manners, and aesthetic taste. At the international exhibition "The Consumer Electronics Show" (CES) held in Las Vegas, USA in January 2018, brand

companies presented their innovations in the field of electronics to the public. According to him, the cities of the future are predicted to have self-parking cars, real-time monitoring of water levels in rivers, and a system that helps fight against polluted air on the streets. The Bosch company focused on smart solutions for cities. During the presentation at CES, Bosch representative Stefan Hartung said: "We need a new concept of the city. One of the main factors here is the technologies that make cities smart."

Research results. One of the problems that will be solved in future cities in Uzbekistan is that drivers spend a lot of time in traffic jams. This problem exists in many countries of the world. In this regard, the low level of professional and business culture of Uzbek drivers is clearly distinguished. Due to this, many road traffic accidents occur in our country, and a large part of the population suffers from it. To solve this problem on a global scale, the "Bosch" company has developed the "Community-based parking" system. With its help, cars automatically calculate the size of spaces between cars in the parking lot and transfer it to a digital map. That is, the car itself finds a parking space and directs the driver there. Thus, not only the time spent by car owners is saved, but also the load on the road infrastructure is reduced. Obviously, in this case, road traffic accidents will decrease in Uzbekistan, and the safety of our citizens will be ensured. "Climo" system, which measures and analyzes air quality by 12 parameters, received the award in the "Smart Cities" category at "CES". This device is 100 times smaller and 10 times cheaper than a conventional air monitoring system. "Climo" makes it possible to effectively fight against environmental pollution, which has become a serious problem in megacities. The presence of this system in Uzbekistan in the future is very necessary for our country, which is recognized as the hottest spot in the world this year. It is no exaggeration to say that such a system cannot be delayed for all cities, especially for industrialized cities (Navoi, Zarafshan, Kuvasoi, Fergana, Kokan, etc.).

Another factor that should be present in future cities of Uzbekistan is new generation electric generators. By 2035, the world will consume 30 percent more energy than today. Similarly, consumption will increase in Uzbekistan. Micro-energy systems (DC) with constant power supply can help our citizens to overcome the energy crisis. They can be used to supply energy to apartment buildings, shopping centers and construction complexes. In particular, higher education institutions and medical institutions are no exception. Microenergy systems consume 10 percent less energy than conventional power plants. They run on renewable energy and come in handy when the general power grid is down due to weather or other reasons. The experience of Singapore can be used to create prototypes of the future cities of our country. In Singapore, a computerized traffic management system saves drivers 60 hours a year. This city is also a leader in the use of technologies in the field of medicine. Meanwhile, Singapore is making significant progress in providing mobile apps that allow the elderly to monitor their health and alert them to the need for emergency medical care. The existence of these factors in the future cities of Uzbekistan and their improvement, in our opinion, will be a step forward. Currently, life in Uzbekistan is unimaginable without air conditioners. And the cities of the future should be without air conditioners. In 2014, the Intergovernmental Panel on Climate Change, in its fifth paper, unanimously declared that signs of global warming will soon be felt and have serious consequences. We are talking about floods, droughts, heatwaves, as well as rising average summer temperatures worldwide. And that didn't take long. It is not a secret to anyone that this year and the current time, the air temperature of our country has reached a record level in the world. In 2018, climatologist Jean Jouzel, author of a report on France's 21st century climate, said that by 2050, temperatures could reach 50°C in most parts of the country. This is an unimaginable situation. People who cannot stand the heat - the elderly, sick, disabled, young children, and pregnant women - are worried about the negative effects of this situation. It is enough that the current air temperature alone causes many seasonal diseases. Another dangerous factor is added to this. According to UN forecasts, the population of the planet in 2050 will be 9.8 billion people. Most of them live in big cities. In such a situation, it is natural

that the atmosphere will be more polluted than it is today. In order to cope with extreme temperatures without further worsening the climate situation, without massive use of cooling systems, the city must adapt to an irreversible process. This is exactly what he is going through now. So what replaces air conditioners? How can you live without air conditioners? Some architects have foreseen this problem. Vincent Caillebaut, a pioneer of ecological architecture, proposes to create projects that are both ecological and heat-absorbing, air-purifying. The architect worked on a project to improve the city's ecology by 2050. He explained that "due to the lack of space, the gardens of Paris are not divided around the building. The buildings themselves will be turned into gardens. Greening of buildings, turning the city into a garden is effective in combating the urban heat island and creates a bio-climate for the city." Even in the cities of our country, greening of the buildings will save the city from overheating. Green zones are created in the public environment. In this way, the city becomes livable. It will allow you to breathe freely even in hot weather. Energy-efficient houses prevent the greenhouse effect from increasing. At the same time, it is necessary to plan the increase of water sources and the construction of fountains.

Conclusions. Today, in our country, there is an increase in the number of haphazard construction works or the start of construction without thorough analysis. Such mistakes should not be repeated in the future. India's 'cities of the future' may pose a threat to the environment. Hugh Byrd, professor of Lincoln University (Great Britain), informed about it. The scientist studied in detail the project of "smart cities" in India. According to the plan adopted by the country's government, 40-60-story skyscrapers will be built in place of old buildings consisting of 3-5-story buildings. The new districts are expected to be more environmentally friendly than the current slums, but Byrd's research has shown that the increase in population density increases the pressure on the environment: skyscrapers consume more resources and emit more waste. This prediction was made based on the study of Bhendi Bazaar, the first of its kind built in Mumbai. As it turns out, the increase in population density in the area where electricity is regularly cut off, water is distributed on an hourly basis, waste disposal and sewerage network activity is not up to the required level only deepens the ecological situation.

References:

1. Байбобоева, Ф. (2023). KORXONANING IQTISODIY XAVFSIZLIGINI TA'MINLASHNING YO 'NALISHLARI VA FUNKTSIONAL ELEMENTLARI. *Economics and Innovative Technologies*, *11*(3), 262-268.
2. Sattikhodjaevich, B. Z., Sultonboyevich, A. A., & Tutiyo, E. (2023). TECHNOLOGY OF MANUFACTURE OF PRECAST REINFORCED CONCRETE STRUCTURES IN A DRY-HOT CLIMATE. *Scientific Impulse*, *1*(10), 1460-1466.
3. Sultonboyevich, A. A. (2024). Temperature and Moisture-Deformations of High-Temperature-Resistant Concrete Under Single Impact of Water and Temperature. *European Journal of Contemporary Business Law & Technology: Cyber Law, Blockchain, and Legal Innovations*, *1*(2), 5-8.
4. Abdurahmonov, A., Madamiovna, K. D., & Egamberdiyeva, T. (2023). High Temperature Resistant Reinforced Concrete Made on the Basis of Industrial Waste. *Best Journal of Innovation in Science, Research and Development*, *2*(3), 26-33.
5. Abdurahmonov, A., Madamiovna, K. D., & Egamberdiyeva, T. (2023). Technology of Manufacturing Technology of Pre-Tensioned Intermediate Plate by Continuous Molding Method. *Best Journal of Innovation in Science, Research and Development*, *2*(3), 34-40.
6. Байбобоева, Ф. (2023). KORXONANING IQTISODIY XAVFSIZLIGINI TA'MINLASHNING YO 'NALISHLARI VA FUNKTSIONAL ELEMENTLARI. *Economics and Innovative Technologies*, *11*(3), 262-268.

7. Байбобоева, Ф. (2023). ТАДБИРКОРЛИК СУБЪЕКТЛАРИ ИҚТИСОДИЙ ХАВФСИЗЛИГИНИ ТАЪМИНЛАШДА МОЛИЯВИЙ ХАВФСИЗЛИК МАСАЛАЛАРИ. *Economics and Innovative Technologies*, *11*(2), 107-112.
8. Nabijonovna, B. F. (2020). Support for small business and private entrepreneurship in Uzbekistan. *ECLSS Online 2020b*, 524.
9. Nabijonovna, B. F. SECURITY OF ECONOMIC ACTIVITY IN ENTERPRISES. *Process Management and Scientific Developments*, 8.
10. Erdős, F., Németh, R., & Bayboboeva, F. (2023). Virtual Teamwork in Gamified 3D Environment. *INFOCOMMUNICATIONS JOURNAL: A PUBLICATION OF THE SCIENTIFIC ASSOCIATION FOR INFOCOMMUNICATIONS (HTE)*, (SP), 15-20.
11. Buzrukov Zakiryo Sattikhodjaevich, Abdurahmonov Adkhamjon Sultonboyevich, & Egamberdiyeva Tutiyo. (2023). QURUQ-ISSIQ IQLIMDA BO'LMA TEMIR-BETON konstruksiyalarni ISHLAB CHIQARISH TEXNOLOGIYASI. *Ilmiy impuls* , *1* (10), 1460–1466.
12. Buzrukov Zakiryo Sattikhodjaevich, Abdurahmonov Adkhamjon Sultonboyevich, & Egamberdiyeva Tutiyo. (2023). SHAHAR XUDONLARDA QURILISH ISHLARINI O'TKAZISH KUCHLI ZILZINA OQIBATLARINI TAHLIL QILISh. *Ilmiy impuls* , *1* (10), 1483-1490. http://nauchniyimpuls.ru/index.php/ni/article/view/9689.
13. Бузруков, З. С., & Кохоров, А. А. У. (2022). Определение прочности кирпичной кладки на срез при сейсмическом воздействии. *Строительство и образование*, (2), 14-18.
14. Sattikxo‘jaevich, B.Z., Mutalibovich, RS, Chorieva, V., & Abduhalilova, M. (2023). SHAHARLARNING EKOLOGIK MUAMMOLARINING SABABLARI VA YECHIM YOLLARI. *JURNAL OF ENGINEERING, MEXANICA VA ZAMONAVIY ARXITEKTURA* , (2), 175-178.
15. Бузруков, З. С. (2023). ОСОБЕННОСТИ СТРОИТЕЛЬСТВА И ЭКСПЛУАТАЦИИ СЕЙСМОСТОЙКИХ ЗДАНИЙ. *GOLDEN BRAIN*, *1*(35), 195-200.
16. Бузруков, З. С., & Кохоров, А. А. У. (2022). Определение прочности кирпичной кладки на срез при сейсмическом воздействии. *Строительство и образование*, (2), 14-18.
17. Zokiryo, B., & Abdurahmonov, A. (2023). G'isht jangidan issiqlikka chidamli plitalarning ba'zi strukturaviy jihatlari. *E3S Web of Conferences* da (401-jild, 04065-bet). EDP fanlari.
18. Бузруков, З. С., & Кохоров, А. А. У. (2022). Определение прочности кирпичной кладки на срез при сейсмическом воздействии. *Строительство и образование*, (2), 14-18.
19. Turg‘unov Muxriddin Sotvoldi o‘g (2024). Technologies for Professional Training Development of Future Builders-Engineers on the Basis of Innovation Approach. European Journal of Contemporary Business Law & Technology: Cyber Law, Blockchain, and Legal Innovations 2, 24-28
20. Abdumonon Kokhorov, Mukhriddin Turgunov (2023). THE ROLE OF MEDIA AND INFORMATIONAL EDUCATION IN THE TRAINING OF CIVIL ENGINEERS. Golden brain 35, 177-182
21. Turgunov Mukhriddin, Abdumonon Kokhorov (2023) MECHANISMS AND ADVANTAGE OF TEACHING STUDENTS TO CREATIVE THINKING THROUGH MEDIA EDUCATION METHODS IN THE INFORMATIONAL EDUCATIONAL ENVIRONMENT. Golden brain 35, 183-188

22. Turgunov Mukhriddin, Abdumonon Kokhorov (2023) FORMATION OF PROFESSIONAL COMPETENCES OF ENGINEER BUILDERS ON THE BASE OF INNOVATIVE TECHNOLOGIES. Golden brain 35, 171-176
23. Turgunov Mukhriddin, Abdumonon Kokhorov (2023) USE OF MEDIA EDUCATION IN DEVELOPING THE PROFESSIONAL TRAINING OF FUTURE CIVIL ENGINEERS IN THE INFORMATIONAL EDUCATIONAL ENVIRONMENT. Golden brain 35, 189-194
24. М. Тургунов Н.Р. Ходжиев (2021) ЭКОНОМИЧЕСКИЙ АНАЛИЗ ПО ГИДРОИЗОЛЯЦИИ ФУНДАМЕНТА ОБЩЕСТВЕННЫХ ЗДАНИИ НАМАНГАНСКОЙ ОБЛАСТИ КАЧЕСТВО. ТЕХНОЛОГИИ. Инновации IV Международная научно-практическая конференция 2, 102-110
25. Turg‘unov Muxriddin Sotvoldi o‘g (2024). Technologies for Professional Training Development of Future Builders-Engineers on the Basis of Innovation Approach. European Journal of Contemporary Business Law & Technology: Cyber Law, Blockchain, and Legal Innovations 2, 24-28
26. Abdumonon Kokhorov, Mukhriddin Turgunov (2023). THE ROLE OF MEDIA AND INFORMATIONAL EDUCATION IN THE TRAINING OF CIVIL ENGINEERS. Golden brain 35, 177-182
27. Madamiovna, K. D. (2023). AHSIKENT CASTLE AND THE CHARACTERISTIC FEATURES OF THE BATHS IN IT. *Новости образования: исследование в XXI веке*, *1*(6), 939-949.
28. Abdurahmonov, A., Madamiovna, K. D., & Egamberdiyeva, T. (2023). Technology of Manufacturing Technology of Pre-Tensioned Intermediate Plate by Continuous Molding Method. *Best Journal of Innovation in Science, Research and Development*, *2*(3), 34-40.
29. Madaminovna, K. D. (2022). CHARACTERISTICS OF FORMATION AND DEVELOPMENT OF THE ART OF BATHROOMING. *INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT, ENGINEERING AND SOCIAL SCIENCES ISSN: 2349-7793 Impact Factor: 6.876*, *16*(3), 24-28.
30. Madamiovna, K. D. (2023). Architecture of Traditional Baths in Central Asia. *Best Journal of Innovation in Science, Research and Development*, *2*(3), 41-47.
31. Abdumutalibovich, K. A., & Lutfillaevna, B. M. (2024). The Role of Bim Technologies in the Information System of Education. *European Journal of Contemporary Business Law & Technology: Cyber Law, Blockchain, and Legal Innovations*, *1*(2), 9-13.
32. Бузруков, З. С., & Кохоров, А. А. У. (2022). Использование солнечной энергии в системах теплоснабжения. *Строительство и образование*, (1), 113-121.
33. Бузруков, З. С., & Кохоров, А. А. У. (2022). Определение прочности кирпичной кладки на срез при сейсмическом воздействии. *Строительство и образование*, (2), 14-18.
34. Abdumutalibovich, K. A., Abdushokirovna, M. Z., & Kh, A. (2023). IMPROVING VIRTUAL LESSON TEACHING METHODOLOGY BASED ON MODERN DIGITAL TECHNOLOGIES. *JOURNAL OF ENGINEERING, MECHANICS AND MODERN ARCHITECTURE*, (2), 187-190.
35. Akiner, M. E. (2016). Smart cities transformation in Turkey. *New arch-international journal of contemporary architecture*, *3*(3), 8-16.
36. Рахимова, Г., Илхом, Қ., & Дедаханов, Б. (2023). ТАЪЛИМ ЖАРАЁНИДА ИННОВАЦИОН ТЕХНОЛОГИЯЛАРНИНГ ЎРНИ. Journal of new century innovations, 21(3), 33-40.

37. Sattikhodjaevich, B. Z., Sultonboyevich, A. A., & Tutiyo, E. (2023). TECHNOLOGY OF MANUFACTURE OF PRECAST REINFORCED CONCRETE STRUCTURES IN A DRY-HOT CLIMATE. *Scientific Impulse*, *1*(10), 1460-1466.
38. Xatamovich, Q. D. (2023). MAMLAKATIMIZDA ARXITEKTURA-SHAHARSOZLIK SOHA MUTAXASSISLARI TAYYORLASHNI TAKOMILLASHTIRISH CHORALARI. *JOURNAL OF ENGINEERING, MECHANICS AND MODERN ARCHITECTURE*, (2), 179-181.
39. Egamberdiyeva, T. (2023). DESIGNING ENERGY EFFICIENT AND PASSIVE HOUSES. *GOLDEN BRAIN*, *1*(35), 153-158.
40. Egamberdiyeva, T. (2023). ARCHITECTURAL AND CONSTRUCTION REQUIREMENTS IN THE DESIGN OF LOW-RISE RESIDENTIAL BUILDINGS. *GOLDEN BRAIN*, *1*(35), 201-205.
41. Egamberdiyeva, T. (2023). DESIGNING ENERGY EFFICIENT AND PASSIVE HOUSES. *GOLDEN BRAIN*, *1*(35), 153-158.
42. Abdurahmonov, A. (2023). THE EXPERIENCE OF THE WORLD AND THE WORLD'S EXPERIENCES ON THE CONSTRUCTION OF MULTI-STOREY PARKING. *GOLDEN BRAIN*, *1*(35), 165-170.
43. Sultonboevich, A. A., & Abdurauf o'g'li, A. I. (2023). WAYS TO REDUCE HYDRATION AND CRACKING OF CONCRETE IN THE PRODUCTION OF SPECIAL REINFORCED CONCRETE PRODUCTS. *British Journal of Global Ecology and Sustainable Development*, *16*, 5-9.
44. Zikriyoxujaeva, M. (2023). NOANANAVIY ENERGIYA MANBAALARIDAN FOYDALANISH MASALALARI. *PROBLEMS OF ARCHITECTURE AND CONSTRUCTION (SCIENTIFIC TECHNICAL JOURNAL)*, *1*(2), 269-271.
45. Zakiryo, B., & Abdurahmonov, A. (2023). Some structural aspects of heat resistant plates from brick fight. In *E3S Web of Conferences* (Vol. 401, p. 04065). EDP Sciences.
46. Sultonboyevich, A. A., & Muhammadalixon o'g'li, H. S. (2023). STUDY OF THE PROPERTIES OF HEATED CONCRETE BASED ON INDUSTRIAL WASTE. *Новости образования: исследование в XXI веке*, *1*(6), 978-985.
47. Абдурахмонов, А. С., & Омонкелдиева, Ш. (2022). Пути снижения обезвоживания бетонной смеси и трещинообразования в железобетонных изделиях при их изготовлении. *Строительство и образование*, (2), 28-31.
48. Razzakov, S., & Abdurakhmonov, A. (2020). G 'ISHT PISHIRISH XUMDONLARI UCHUN ISSIQBARDOSH TEMIR BETON YOPMA PLITA. *SCIENCE AND INNOVATIVE DEVELOPMENT*, *3*(3), 113-119.
49. Sattikxo'jaevich, B.Z., Mutalibovich, RS, Chorieva, V., & Abduhalilova, M. (2023). SHAHARLARNING EKOLOGIK MUAMMOLARINING SABABLARI VA YECHIM YOLLARI. *JURNAL OF ENGINEERING, MEXANICA VA ZAMONAVIY ARXITEKTURA* , (2), 175-178.