COUNTRY PROFILES
ON
HOUSING AND LAND MANAGEMENT

UZBEKISTAN

UNITED NATIONS
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FOREWORD

It gives me immense pleasure to present for your attention the *Country Profile on Housing and Land Management*, which is the result of a tripartite partnership between United Nations Development Programme in Uzbekistan, United Nations Economic Commission for Europe and the Government of Uzbekistan. The Country Profiles are a tool for Governments to review their existing housing and land use policies, strategies, and institutions, and to get exposed to a set of recommendations based on best practices and experience from other countries. In this regard I would like to take the opportunity to express my appreciation to the Government of Uzbekistan for the good cooperation throughout the process and to UNECE for providing much of the substantive and analytical content of the report.

Governments across the globe should strive to ensure access to adequate and affordable housing for its citizens. The new global development agenda for the next 15 years, the Sustainable Development Goals also call on countries to focus on adequate housing in urban and rural areas, where one can live in comfort, peace, security and dignity. SDGs also emphasize that cities, which are hubs for ideas, commerce, culture, science, productivity and social development, have enabled people to advance socially and economically. At the same time, SDGs call on countries to deal with many existing challenges to maintaining cities in a way that would continue to enable creating jobs and prosperity, while not straining limited natural resources. The urban and rural residential areas of the future would provide opportunities for all, with adequate and affordable access to basic services, water and energy, and transportation.

UNDP has successfully worked with the Government of Uzbekistan in improving energy performance of its public buildings. The buildings sector consumes nearly 50% of the total energy generated in the country. Therefore, enhanced resource consumption in the buildings and the housing sectors of Uzbekistan is significant in ensuring sustained socio-economic development and environmental sustainability. Investments in low-emission housing and clean technologies can reduce energy consumption, thereby reducing household energy bills and associated greenhouse gas emissions. Some of our joint achievements with the Government of Uzbekistan include introduction of energy efficient building codes, leading to 25-50% reduction in Government financed new and retrofitted buildings, development of specialized curriculum in public universities on energy efficiency in buildings. UNDP also developed the Low-Emission Development Strategy of Uzbekistan, focusing on measures to improve energy efficiency both on the supply and demand side (buildings).

Over the past decade, Uzbekistan has shown significant economic growth. Over time, the growing economy and population will require that a delicate balance between demands for socio-economic development (including expansion of the housing stock) with the need to protect environment, is reached. This will require enhanced spatial planning, land use and its registration and mature real estate markets, which can guide future territorial and regional development. We hope to work with the Government of Uzbekistan in some of these important reform aspects within the framework of the United Nations Development Assistance Framework (UNDAF) 2016-2020.

The *Country Profile on Housing and Land Management* intends to reach a broad audience of national policy-makers and experts. I also believe that the study will be of great interest for other countries in transition, to learn and benefit from Uzbekistan’s experience in housing and land management.

Stefan Priesner
UNDP Resident Representative
in Uzbekistan
Country Profiles on Housing and Land Management are intended to assist governments to improve the performance of their housing and land management sectors and, at the same time, to promote sustainable development. The Profiles analyze trends and policy developments and make an overall assessment of the political, economic and social framework of a country’s housing and land management sectors. This work was initiated by the United Nations Economic Commission for Europe (UNECE) Committee on Housing and Land Management in the early 1990s in response to requests from UNECE Member States.

The studies are carried out by international teams of experts in cooperation with government bodies, other international organizations, non-government organizations (NGOs), local authorities, and the private sector. Through a process of broad consultation, the experts undertake a comprehensive review of the housing and land management sectors and develop recommendations to help policymakers to address urban and rural development challenges.

This Country Profile on Uzbekistan’s housing and land management sectors, prepared at the request of the Government of Uzbekistan, is the eighteenth in the series. The Country Profile programme continues to focus on specific challenges or achievements in the housing and land management sectors that are particularly relevant to the country under review. In the case of Uzbekistan, these issues include housing policies and Government support measures for the construction of housing in rural areas; increased demand for housing of the fast-growing population; and depleted urban infrastructure inherited from the Soviet times.

This Country Profile report lays out a set of policy recommendations. Their timely and effective implementation is regarded as crucial to meeting the challenges Uzbekistan currently faces in the areas of housing and land management.

I would like to thank the international and local experts who contributed to the preparation of this Country Profile, as well as those who provided financial and in-kind support, including the UNDP Country Office in Uzbekistan and the Russian Federation.

I invite all those with an interest in Uzbekistan’s housing and land management sectors - policymakers and legislators, Government officials, academics, NGOs and other national stakeholders, as well as international organizations, lender and donor organizations, technical assistance agencies and private sector investors - to make full use of the information and recommendations contained in the study. It can serve as a framework for future action, and can help shape programmes at the national and local levels.

Finally, I would like to stress the relevance of the Country Profile reviews as unique instruments that allow UNECE countries to share experiences on housing and land management issues; to compare trends and gain knowledge from different practices; to adopt policies and planning tools; and to learn about actions implemented. Our experience has shown that Country Profiles are a practical policy tool that all stakeholders concerned can use to address development-related challenges in the housing and land management sectors, most particularly in countries with emerging economies such as Uzbekistan.

Christian Friis Bach
Executive Secretary
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ABOUT THE UNECE COUNTRY PROFILES ON HOUSING AND LAND MANAGEMENT AND RELATED PUBLICATIONS

This Country Profile on the housing and land management sectors of Uzbekistan was requested by the Government of Uzbekistan and began with a preparatory mission by the UNECE Secretariat. A fact-finding mission by the international expert team was carried out in June 2014.

The project’s expenses were covered by the UNDP Country Office in Uzbekistan and by funds provided by the Russian Federation. The successful conclusion of the project would not have been possible without this generous support.


In addition, the fundamental documents approved by UNECE Member states could provide a framework for developing sustainable policies in housing and land management: The Geneva UN Charter on Sustainable Housing and the Strategy for Sustainable Housing and Land Management in the ECE region for the period 2014-2020.

This Country Profile and other related publications are available on the UNECE website (http://www.unece.org/housing.html).
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DISCLAIMER

Unless otherwise stated, all data were provided by the Government of Uzbekistan.
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LIST OF ABBREVIATIONS

Abbreviations and acronyms

ADB  
Asian Development Bank

CIS  
Commonwealth of Independent States

EC  
European Commission

EU  
European Union

GDP  
gross domestic product

GEF  
Global Environmental Facility

GIS  
geographic information system

Goskomarkhitektstroy  
State Committee on Architecture and Construction

Goskomzemgeodzkadastr  
State Committee on Land Resources, Geodesy, Cartography and State Cadastre

HOA  
homeowners association

IDB  
Islamic Development Bank

JSC  
Joint Stock Company

PHOA  
private homeowners association

PPP  
purchasing power parity

ROAA  
return on average assets

SSR  
Soviet Socialist Republic

SUE  
State Unitary Enterprise

S&P  
Standard & Poor Financial Services LLC

TSS  
Tashkent Settling System

UNECE  
United Nations Economic Commission for Europe

UNESCO  
United Nations Educational, Scientific and Cultural Organization

UNDP  
United Nations Development Programme

USD  
United States Dollar

Uzkommmunkhizmat  
Uzbekistan public utilities agency

UZS  
Uzbekistani Som

VAT  
value added tax

Weights and measures

Gcal  
gigacalorie

kg  
kilogram

km  
kilometre

km²  
square kilometer

kV  
kilovolt

kW  
kilowatt

kWh  
kilowatt-hour

m²  
square metre

m3  
cubic metre

mV  
millivolt

MW  
megawatt
Overview

Uzbekistan, a country in Central Asia, has a long history and ancient culture. Most of the country’s territory is plains, dominated by desert zones. Summers are long, hot and dry, while winters are rather cold and short, with little snow.

Uzbekistan has the third-largest population of the former Soviet Union countries, exceeded only by Russia and Ukraine, and ranks 44th worldwide. It is the most densely populated country in Central Asia, with an average population density of 67.9 people per m².

In 2013 the World Bank classified Uzbekistan as a lower-middle-income country, with a GDP per capita of USD 1,907 in current prices. Rapid economic growth during the last decade has been largely due to the development of more capital-intensive sectors of the economy, particularly the fuel and energy sectors, and is associated with access to natural resources rents.

Legal and institutional framework for the housing sector

Housing construction and the housing sector in general, are mainly regulated by the Housing Code, Urban Development Code, Civil Code and Land Code, as well as the Law on Mortgage, Law on Private Homeowners Associations, Law on Privatization of Public Housing and Law on Town Planning, among others. In addition, they are governed by numerous Presidential Decrees, resolutions of the Cabinet of Ministers, and targeted State programmes. Responsibility for housing sector policy development is vested in multiple agencies.

Numerous legal acts and special measures make it difficult to view housing policy in terms of an integrated, long-term Government strategy. Therefore, it is vital to prioritize housing policies and to develop a long-term housing strategy.

Existing legislation can be further harmonized to ensure clearer delineation of ministerial and departmental authority. Alternatively, a separate Government agency, ideally with Ministerial status, could be established and authorized to develop and implement housing policy. Uzbekistan also may consider developing new legislation and formalizing public participation in development and implementation of policies, programmes and plans.

Legal and institutional framework for land use

With limited exceptions, land in Uzbekistan cannot be owned privately by individuals or collectives. The regulatory framework for land use contains a considerable number of regulations, not all of which are consistent.

The Government would benefit from considering changes to the legal framework to permit new forms of land tenure, as well as greater protection for land rights. In addition, all land and property laws could be reviewed to reconcile discrepancies, for example, between the Civil Code and Land Code requirements for registration of property and property rights. Likewise, preparations could be made for further modernization of land and property laws.

Land management is carried out by public authorities at different levels, for example, with regard to allocating land for agricultural and other activities, building facilities, controlling land use, protecting land, maintaining the land cadastre, and implementing land monitoring. The State Committee on Land Resources, Geodesy, Cartography and State Cadastre (Goskomzemgeodezkadastr) represents a key Government body responsible for land use policy.

As the land market matures and more property is registered, however, the relevance of Goskomzemgeodezkadastr will increase. Preparing for this by adopting more business disciplines will be a good investment for the future.
Housing trends and patterns

Housing construction is greatly influenced by the country's population growth and rate of urbanization, as well as the level of remittances from overseas workers. As a result of remittances, private housing construction was boosted in the regions for the last five to ten years.\(^1\) In urban areas, the increase in housing stock is mainly a result of administrative and territorial reforms, rather than an increase in construction. The high rate of rural housing construction, meanwhile, largely results from Government policies supporting rural housing provision, which aim at increasing the quality of rural life and at decreasing rural-urban migration and urban sprawl.

In Uzbekistan, the predominant form of housing tenure is private ownership. Types of tenure for residential housing, notably in rural areas, need further Government support to create a social housing sector. This will provide housing to disadvantaged population groups such as low-income households, single-parent families and elderly people, under a lease agreement with no right to privatization, via the non-profit and for-profit rented housing sectors.

Detached houses predominate, representing about 70 per cent of total dwellings. Although apartment buildings make up a small share of dwellings, most people live in multi-family housing. The average rate of housing consumption is slightly below the norm established by the Housing Code.

Overall, the housing market faces considerable challenges to satisfy actual and future housing demand. At the same time, housing affordability is constrained by the low income level of many households. An important development would be to empower local authorities to adopt housing development programmes to satisfy existing and future housing demand. Further, the current set of socio-economic indicators may be strengthened by creation of a new indicator measuring housing sector status, reflecting housing conditions and needs. While developing such indicators, the right to adequate housing (Article 11 [1] of the International Covenant on Economic, Social and Cultural Rights) can be relevant to use and apply, to the extent possible; this includes such elements as legal security of tenure, availability of services, materials, infrastructure, affordability, habitability, accessibility, location and cultural adequacy.

Housing stock management and maintenance

On average, every condominium owners association serves six apartment buildings; only 29 per cent of all such private associations represent a single building. Even so, trade-offs always exist between the bargaining power of large associations versus the more individual and responsive service a single-building association can provide.

Because households living in privatized apartment buildings tend to have below-average income, this lack of owners’ financial resources results in considerable challenges with regard to overhaul and modernization of privatized apartment houses.

Development of professional standards for apartment-block management and maintenance, based on international best practices, will help to improve the quality of multi-family housing management by professional managers or management agencies. Service quality likewise could be enhanced by

\(^1\) More information is available from:


capacity building of private managers and private homeowners associations, complemented by opportunities to exchange experiences and disseminate best practices. Capital repairs of housing stock will need to be prioritized; in turn, the Government may benefit from development of policies to support housing renovation by homeowners associations. Non-profit organizations likewise could be supported in carrying out awareness-raising and training events for private homeowners associations, including the elaboration of public monitoring practices.

In Uzbekistan buildings account for half the nation’s total energy consumption – 17 million tonnes of oil equivalent per year – with important implications for achieving sustainable development. Nearly 50 per cent of heat escapes through inefficient windows, doors, ceilings and walls, leading to an energy consumption of 320-690 kWh/m² per year. The introduction of "green" buildings would save more than 8 million tonnes of oil equivalent and reduce annual costs by USD 2 billion. A national programme thus is urgently needed to support the use of renewable energy sources, especially solar energy.

**Rural housing construction**

Access to social services and modern communication is significantly lower in rural areas, and a significant cause of youth migration to cities. About 1.5 million families in rural areas, living in self-built houses, need to improve their housing conditions to meet modern construction standards and seismic stability requirements.

The Government has taken numerous important steps to strengthen rural development. For example, it declared the year 2009 as the "Year of Rural Development," and the corresponding State Programme on Construction of Model Detached Housing in Rural Areas was instigated by Presidential Decree. The programme was aimed at improving the rural quality of life, stimulating the equality of urban and rural living conditions, ensuring integrated development, and creating modern social and industrial infrastructures in rural areas. Model projects for rural residential buildings were developed and, to reduce the cost of construction, the programme used a limited range of standard projects.

Structures constructed on 0.06-hectare plots included car shelters, gas-fired boilers, outside toilets, and brick walls surrounding the plot. The design also included a pantry, space for small livestock and poultry, in-site water supply, sewerage connection and electricity. As a result of the programme, more than 33,500 houses were built between 2009 and 2013. Although this represents a relatively small share of rural housing overall, the residential estates have created a new standard for housing planning solutions, materials and components.

The ability of the State to provide mortgages for programme participants at an extremely favourable rate depends in part on credit from international financial institutions, which may jeopardize the extension of the programme in future. With planned increases in housing construction, fewer participants may meet the income conditions for creditworthiness, despite the high demand for new rural housing.

At the same time, the range of potential participants could be extended during implementation of the next stage of the programme. For this, a choice of single-family housing projects, new housing tenures and architectural solutions would need to be developed. This also would address a wider range of issues related to programme implementation and ensure maximum positive impact socially, economically and environmentally.

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Urban development and planning

Having been part of the former Soviet Union, Uzbekistan inherited a complex hierarchical planning system, and urban planning is highly centralized. Planning documentation has a generally pyramidal hierarchy, from the Master Scheme of Settlement to schemes of territorial planning, down to the master plan of an individual settlement.

Drafting of master plans involves industry experts at both national and local levels, as well as coordination with Ministries, city and viloyat (region) administrations. Once a master plan is approved, a makhalla (local community) organizes public conferences to explain the master plan’s impact on local neighbourhoods; nonetheless, public participation in urban planning in Uzbekistan is very low compared to other countries. To counter this, the development of general action plans, with consideration of local conditions, would benefit from a gradual shift to municipal authorities, following frameworks set out in national policies and taking into account regional development action plans.

Meanwhile, policy changes already have shaped the housing stock of Tashkent, the capital of Uzbekistan, and the largest city in both the country and in Central Asia. Initially, high-rise housing was favoured because of a need to maximize land usage, but this evolved to provision of urban land for low-rise individual buildings. The share of low-rise buildings exceeded plans, however, while the share of medium- and high-rise buildings did not reach the target figures of the 1988 Master Plan that were set for 2015.

Moving forward, to provide more consistent, compact and comfortable urban development, special attention will be needed toward limiting individual housing and low-density use of plots, improving walking accessibility, and creating green spaces. Public transportation infrastructure also will require further development.

Infrastructure and public services

A key issue with regard to public services relates to deterioration of infrastructure networks and equipment, affecting the reliability and continuity of services. Key demographic changes and increasing urbanization both require the revision of planning and distribution of public facilities, and the promotion of sustainable consumption of resources.

As an example, 6 per cent of urban residents and 21 per cent of the rural population – some 5 million people – have no access to safe drinking water; up to 23 per cent of water is lost in transportation. The degradation of water resources thus requires new water resource management policies, investments in improved water pipeline capacity, and upgrading of deteriorated water supply systems.

In addition, local sewer systems are accessible for only 38 per cent of urban dwellers and less than 5 per cent of the rural population. Disparities between consumption of water (1.6 billion m³) and sewage disposal (0.9 billion m³) further lead to wastewater flooding of settlements in some areas, as well as to poor health and environmental issues.

Only about 43 per cent of the housing stock is provided with district heating, yet the operational lifespan of most district heating systems has been exceeded, challenging the ability to ensure stable central heating and hot water supply.

Although almost universal access to electricity is found across Uzbekistan, certain regions report interruptions in power supply. Utility rates are generally affordable to the public, with only about 5 to 10 per cent of the population experiencing difficulties in paying utility bills; these bills accounted for

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8.3 per cent of household expenditures in 2012. However, utility service enterprises have incurred significant debts amid these low tariffs.

**Land administration and land use**

State registration of property title or rights is mandatory. There are four registers in Uzbekistan - land, residential buildings, non-residential buildings, and mortgages. All are managed by different agencies, although all report to Goskomgeodezkastr. To strengthen effectiveness at both central and local levels, development of a unified, integrated registration and cadastre database administered by the Goskomgeodezkastr is recommended.

Land use is directed by the State at central and local levels to ensure productivity of crops essential to the economy, such as cotton and wheat. Farmers have land use rights granted by khokimiyat (local authority) officials based on the highest bid, and tied to successful productivity. Land leased out cannot be sold, mortgaged, given away or exchanged. This inability to transfer leases, use them as a source of credit or have security of tenure represents serious investment impediments, including with regard to farming equipment upgrades, soil quality improvement and general farm innovation.

For the Government, the challenge continues to be balancing owners’ rights with the need to regulate land use in society’s best interests. Accordingly, the land policy framework will benefit from a shift away from large-scale, centralized planning toward a free-market economy, with legal ownership of land by individuals, families and farmers at its core.

**Financial framework for the housing and land sectors**

Government policies aim to ensure the sustainable growth of non-budgetary housing investment. In all, citizens’ assets comprised 81.6 per cent of total investment in 2012, while bank loans accounted for 11.6 per cent and public funds for less than 1 per cent. Government investments are primarily intended to encourage model housing construction in rural areas, as discussed above. Government incentives to local businesses involved in large-scale projects in the housing and utilities sectors would help to boost their involvement.

In 2015 the property value of the Tashkent secondary housing market was USD 723 per m². Such price levels are unaffordable for most households, with an average housing affordability index (ratio of average apartment value to average household yearly income) of 5.9 years (3.8 years in Tashkent). Individual housing construction costs, if paid solely by the homeowner, stand at about USD 230 per m², giving a housing affordability index of 2 years. In contrast, the State Programme on Construction of Model Detached Housing in Rural Areas – the largest national housing finance programme – allows qualifying participants to receive subsidized mortgages of up to 75 per cent of the house value for 15 years. The yearly interest rate in the first five years is 7 per cent (compared to the average market loan rate of 14-19 per cent); thereafter, the rate increases to 0.9 per cent of the refinancing rate of the Uzbekistan Central Bank, which in July 2014 stood at 9 per cent per year. Participants in the programme are also wholly exempt from income tax for the mortgage repayment period, with virtually all programme stakeholders enjoying tax benefits.

Uzbekistan currently receives limited long-term funding from foreign institutional/private investors. However, foreign investment could be attracted not only to new housing development, but also to reconstruction and maintenance of existing housing stock, as well as to the improvement of public services facilities. Raising the liquidity and transparency of the securities market could serve as a

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5 Resolution of the Cabinet of Ministers No. 285 of 7 October 2015 on measures to further improve the procedures for granting land-based competition for entrepreneurial activities and procedures for obtaining building permits. From 1 January 2016, the State will provide a land plot of 1.0 hectares for permanent use for entrepreneurial activity based on the competition.


7 In 2012, total funds for the programme amounted to about UZS 906 billion.
basis for long-term lending improvements, including mortgage lending. Development of the microfinance sector also requires additional support, ensuring housing improvement loans for low-income households and households with a high proportion of non-monetary income.

Lastly, national banking legislation contains few specific regulations for the provision of mortgages by banks. Further development of banking legislation would prove beneficial, including security, guarantees, insurance, and property registration regulations. This would encourage implementation of advanced risk management systems, as well as introduction of special mortgage regulations for lending agencies.
Uzbekistan has a long history and ancient culture. The discovery of Stone Age tools and graves in the Ferghana and Bukhara viloyats (regions) shows that ancient people inhabited the territory of modern Uzbekistan as early as the Paleolithic era.

The oldest states began to emerge in Central Asia in the 7th Century BC, and the Great Silk Road, linking Asia to the Mediterranean from ancient times, passed through Uzbekistan. Three of the most important caravan routes passed through central Uzbekistan and the Ferghana Valley; the ancient cities of Uzbekistan (Bukhara, Samarkand and Tashkent, for example) were important international centres of commerce, knowledge and cultural exchange.

In the Middle Ages, the leader of one of the Turkic tribes, Timur (Tamerlane, as he is called in Europe), created a vast empire with its capital in Samarkand, stretching from the borders of China to the Middle East. By the 16th Century, its territory was divided into the Bukhara and Khiva khanates, and later, in the 18th Century, the third khanate of Kokand was formed. All khanates gradually came under the influence of the Russian Empire and later became part of the Soviet Union. In 1991, the Republic of Uzbekistan gained independence.

A. Geographic location

Uzbekistan, located in Central Asia, is bordered by Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Afghanistan. It is a doubly landlocked country, and has access only to the Aral Sea.

The total area of the country is 448,969 km². On 1 January 2012, 46.1 per cent of land area was agricultural, 21.7 per cent was forested, and irrigated area totalled 4.3 million hectares, or 9.7 per cent of land area.8

Most of Uzbekistan’s territory is plains, dominated by desert zones (Kyzyl Kum and Karakum).

B. Socio-economic development

Modelling and implementation of key economic structural reforms have allowed Uzbekistan to become a lower-middle-income country, according to World Bank classification, within 20 years. Consequently, poverty has been reduced by a factor of almost 2 (see Annex 1 for key macroeconomic indicators). In 2013, GDP per capita stood at USD 1,878 (in current prices). In the same year, the World Development Indicators reported that Uzbekistan has moved to 64th position in terms of GDP per capita based on purchasing power parity (PPP), according to 2011 prices. Boosting macroeconomic stability and investment attractiveness of the country has been determined as an important dimension for sustained economic growth. With enormous natural, mineral raw materials, labour and human potential, Uzbekistan ranked as one of the least developed parts of the Soviet Union in terms of living standards and development in the social and humanitarian spheres.

Figure I
Map of Uzbekistan


Figure II
Inflation rate and refinancing rate of the Central Bank, 2005-2013 (Percentage)

Source: State Committee of the Republic of Uzbekistan on Statistics (hereinafter, State Committee on Statistics).
Implementation of a balanced and targeted monetary and fiscal policy – a necessary condition for ensuring macroeconomic stability – has reduced inflation from 21.6 per cent in 2002 to 6.8 per cent in 2013. Based on the rate of inflation, and in order to maintain economic growth, the Central Bank's refinancing rate was reduced from 30 per cent in 2002 to 12 per cent in 2013 (Figure II). The balance of the State budget since 2005 was estimated as surplus, despite the fact that the tax burden was reduced from 45 per cent in 1993 to 20.5 per cent in 2013. (Figures III and IV).

A major factor of sustainable development was promotion of the structural transformation of the economy through the growth of investment activity.

**Figure III**

**Balance of the State budget**
(Percentage of GDP)

**Source:** Ministry of Economy of the Republic of Uzbekistan (hereinafter, Ministry of Economy).

**Figure IV**

**Level of tax burden**
(Percentage of GDP)

**Source:** Ministry of Economy.

9
Since 2000, the volume of investments in the economy averaged 22 per cent of GDP and grew by an average of 11.1 per cent per year, which is one of the highest and most stable results in the international community (Figure V). Investments were mainly directed to the development of the industrial and infrastructure sectors, which contributed significantly to economic growth. Compared with 1990, the annual volume of industrial production increased in 2013 by a factor of 3.8 (Figure VI).
As a result of structural policy implemented in Uzbekistan's economy, there have been significant changes. The economy has moved away from the production of raw materials by gradually transferring to production industry with high added value and by providing new services; new industries (automotive, petrochemical, railway engineering) emerged.

Figure VII
Sectoral structure of GDP, 2000 and 2013
(Percentage)

<table>
<thead>
<tr>
<th>Year</th>
<th>Industry</th>
<th>Agriculture</th>
<th>Construction</th>
<th>Transport</th>
<th>Trade</th>
<th>Other</th>
<th>Net tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>13%</td>
<td>14%</td>
<td>29%</td>
<td>11%</td>
<td>8%</td>
<td>6%</td>
<td>19%</td>
</tr>
<tr>
<td>2013</td>
<td>24%</td>
<td>8%</td>
<td>12%</td>
<td>6%</td>
<td>18%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: State Committee on Statistics.

The share of agriculture in economic structure declined from 29 per cent in 2000 to 18 per cent in 2013, while the share of industry increased from 14.2 to 24.2 per cent respectively (Figure VII.)

The ongoing structural changes resulted in the increase of the export potential of the economy. During 1990-2013, the exports increased by a factor of 34.1. Creation of new competitive industries, contributed to the increased share of manufacturing industries in exports of goods. For example, in 2013 the share of cotton exports declined to 7.7 per cent, compared to 59.7 per cent in 1990, while the share of non-primary goods increased from 30 to 70 per cent.9

Expansion of the integration process was reflected in the geographical structure of foreign trade by Uzbekistan, where the share of CIS countries tended to decrease and the share of other countries increased. Russia, China, South Korea, Turkey, and Switzerland are major trade partners.

At the same time, Uzbekistan has a developed transport infrastructure and developed major international logistics centres and industrial free-trade zones in such regions as Navoi, Angren and Jizzakh.

In addition, the introduction of new social infrastructure, along with reforms in education and health care sectors, has contributed to improving access to social services. The share of expenditures on social services and social support of the population in 2013 reached 59.2 per cent, compared to 31.5 per cent in 1990.

High rates of economic growth in 2000-2013 also allowed real per capita income to increase by a factor of 9.4, while the average monthly wage grew by a factor of 18.8.

9 State Committee on Statistics.
C. Population and demography

In terms of population, Uzbekistan ranks 44th worldwide and third among the countries of the former Soviet Union, after Russia and Ukraine. In 2012 the population of Uzbekistan was 30,243,172 (the average annual number of residents). Since 1992 the population has grown by nearly 9 million. In 2013, the urban population stood at 51.1 per cent of the total; both rural and urban areas have experienced population growth. However, daily commuting from rural to urban areas is common, especially in Tashkent, Andijan and Ferghana.

Uzbekistan is the most densely populated country in Central Asia: the average population density is 67.9 people per km², which is significantly higher than in neighbouring countries (6 per km² in Kazakhstan, 59 per km² in Tajikistan). Because of geographic conditions, the population distribution is uneven: In desert areas, such as Karakalpakstan or Navoi viloyat, the population density is very low. The most densely populated viloyats include Andijan, which occupies less than 1 per cent of the country’s area but has more than 9 per cent of the total population, as well as Tashkent viloyat, where the population density is 9.6 times higher than the national average.

Ethnically, the population of Uzbekistan is comprised of Uzbeks (83.1 per cent), Russians (2.6 per cent), Tajiks (4.8 per cent), Kazakhs (2.6 per cent), Karakalpaks (2.2 per cent), Tatars (0.7 per cent), and other (4.0 per cent).

In 2013, total net migration was negative, and amounted to 34,566 people, down from the 2012 figure of 40,952 and the lowest since Uzbekistan gained independence.

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11 State Committee on Statistics.
D. Government and administrative-territorial structure

The Republic of Uzbekistan, established on 27 October 1924 as part of the Soviet Union, gained its independence in 1991. According to the 1992 Constitution, Uzbekistan is a sovereign democratic republic with a presidential form of government. The current President, Islam Karimov, has been in charge of the country since 1990 and was re-elected in March 2015 with more than 90 per cent of the vote.

The country consists of the Republic of Karakalpakstan, 12 viloyats (regions), 168 rural and urban districts, cities subordinate to their viloyats, towns subordinate to their district, townships, and rural citizens’ assemblies (see Figure IX and Annex II).

The system of government follows the principle of separation of powers between the legislative, executive and judicial branches. The President is head of State, and executive power is exercised by the Cabinet of Ministers. At local level, the executive branch is represented by khokimiyats (local authorities) of regions, cities and districts. The highest representative body is the Oliy Majlis (Parliament), which exercises legislative power. The judicial system of Uzbekistan consists of the Constitutional Court, the Supreme Court, the Supreme Economic Court and the Economic Court of the Republic of Karakalpakstan. Dealing with civil and criminal cases are the Supreme Courts of the Republic of Karakalpakstan, plus viloyat and Tashkent city courts and inter-district (city) courts. In addition, there exist military and economic courts for viloyats and Tashkent city.

Makhallas (local communities) comprise a unique social and administrative body in Uzbekistan. A makhalla is a self-governing administrative unit, united on a small area. Today a makhalla can also be a group of multi-storey houses. Makhallas play an important role in keeping traditions and culture prominent among the lifestyles of their residents; traditionally, a makhalla helps residents to organize weddings, funerals, house refurbishments, and other events.

Figure IX
Map of administrative-territorial divisions of Uzbekistan

1 - Tashkent city
2 - Andijan viloyat
3 - Bukhara viloyat
4 - Ferghana viloyat
5 - Dzizzakh viloyat
6 - Namangan viloyat
7 - Navoi viloyat
8 - Kashkadarya viloyat
9 - Samarkand viloyat
10 - Syrdarya viloyat
11 - Surkhandarya viloyat
12 - Tashkent viloyat
13 - Khorezm viloyat
14 - Republic of Karakalpakstan

Source: Goskomzemgeodezkadstr.
CHAPTER II
Legal and Institutional Frameworks for Housing, Urban and Rural Development, and Land Use

A. Legal framework for housing, urban and rural development and land use

Article 53 of the Constitution declares that the State guarantees the legal protection of all forms of property, including private property. The land, its subsoil, water, flora and fauna, and other natural resources are defined as common national wealth (Article 55). Based on this, the country has adopted a series of laws defining the legal framework for the housing sector, urban and rural development, and land use.

Housing and urban planning legislation

Legislative acts regulating the development of housing in both urban and rural areas include the Housing Code, the Urban Development Code, and the Law on Mortgage, Law on Private Homeowners, Law on Privatization of Public Housing, and Law on Town Planning.

The Housing Code (No. 713-I of 24 December 1998) regulates property relations among citizens, legal entities, Government bodies and local authorities. It governs issues of origin, implementation, modification and termination of property rights, as well as rights of ownership and use of dwellings.

In addition, it sets standards of preservation, maintenance and repair of housing stock, as well as of record-keeping. It also monitors compliance with housing rights and targets use of the housing stock. The Housing Code stipulates that a dwelling may be under private or public ownership, as well as the means by which it can convert from one form to another.

Accommodation in State or municipal housing stock is leased, without privatization rights, to socially vulnerable people. These are defined as people with disabilities; single elders; pensioners whose per-capita income is below the minimum wage; newly established young families in need of housing; and orphans and children left without parental care.

The continuing need for social housing is shown by recent appeals to the Authorized Person of the Oliy Majlis for Human Rights (Ombudsman) on issues relating to housing construction, provision and distribution, as well as recognition or restoration of the title to a dwelling. Most appellants are members of young families, people with disabilities, people with low income, and other citizens who have the right to public housing or seek State assistance in purchasing or constructing housing (see Table 1).

The Law on Privatization of Public Housing (Law No. 846-XII of 7 May 1993) defines the legal, economic and social framework, as well as the procedure, for privatization of public housing stock. Under this law, the vast majority of public housing stock (98 per cent) has been privatized; as a result, the proportion of individual private housing has increased from 41 per cent to 98.9 per cent overall.

The Law on Mortgage (Law No. ZRU-58 of 4 October 2006), provides specific mechanisms for lending in the housing sector and regulates the use of real estate as collateral. General rules contained in the Civil Code, (No. 163-I, approved 1995) and the Law on Pledge (Law No. 614-I, revised 1998) are applied to mortgages unless other mortgage legislation rules apply.
There is a legislative framework for a functioning mortgage market in Uzbekistan, and the necessary infrastructure has been developed. The National Institute of Credit Information of the Central Bank and the Credit Bureau’s Credit Information-Analytical Centre, as well as the Pledge Register created by the Central Bank, all register mortgages.

According to the Central Bank 53,791 mortgage loans, worth about UZS 2.1 trillion, were given during the period 2003-2012. Moody’s Investors Service reports that the mortgage portfolio at the end of 2013 stood at UZS 2,346 billion; this was equivalent to 2 per cent of GDP, 83 per cent of total debt on loans to households, and 14 per cent of banks’ total loan portfolio.¹³

The Law on Private Homeowners (Law No. ZRU-32 of 12 April 2006) regulates creation and activity of private homeowners associations (PHOAs) in apartment buildings. These are recognized as voluntary associations, created for joint management and delivery of maintenance, preservation and upkeep of housing stock, along with common property management in the apartment building. The law provides for mandatory membership in such associations. Relations between the association and owners of non-residential premises in apartment buildings are contract-based. All owners of premises in the building are required to participate in the general expenses for maintenance and repair of common property.

The State supports PHOAs through tax incentives and access to credit, as well as budget subsidies for capital repairs of apartment buildings. Chairpersons of HOAs are regularly trained by the national training centre under the Uzbek agency “Uzkommkhizmat”, with the support of local authorities and international projects.

The Urban Development Code (No. 354-II, enacted on 7 May 2002) defines the elements of urban development activities; the responsibilities of public authorities, urban planning documentation and State town planning cadastre; urban planning; and the use of urban and suburban areas.

Licensing procedures for construction plots, expert reviews of project documentation and building permits are all regulated by the Resolution of the Cabinet of Ministers No. 54 of 25 February 2013 on


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**Table 1**

Citizens’ appeals to the Ombudsman on housing and communal services issues

<table>
<thead>
<tr>
<th>Complaints</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total complaints received</td>
<td>819</td>
<td>661</td>
<td>587</td>
<td>505</td>
</tr>
<tr>
<td>• on issues related to obtaining housing</td>
<td>509</td>
<td>387</td>
<td>250</td>
<td>220</td>
</tr>
<tr>
<td>• on issues related to utilities and home repair</td>
<td>144</td>
<td>122</td>
<td>171</td>
<td>157</td>
</tr>
<tr>
<td>• on issues related to the activities of homeowners associations (HOAs)</td>
<td>18</td>
<td>26</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>• on land allocation issues</td>
<td>148</td>
<td>126</td>
<td>141</td>
<td>107</td>
</tr>
</tbody>
</table>

Measures to Radically Simplify the System of Allocation of Land for Urban Development Activities and Other Non-agricultural Purposes, and Issuing Permits for Construction of Objects. This resolution defines the powers of various parties and terms for approval of documentation supporting a licence application. For example, 47 days are allowed for preparation, coordination and approval of documents for land allocation (see also Annex 3).

Quality of construction, including installation of water and sewerage systems, flat-roof waterproofing, laying of floor tiles, and installation of doors and windows, is controlled by building regulations and rules. Compliance with these is mandatory for all participants in construction activities, including the customer-developer, designer and construction contractor.

The housing sector and housing construction also are regulated by numerous Presidential Decrees and resolutions of the Cabinet of Ministers, including:

- Resolution of the Cabinet of Ministers No. 127 of 30 November 2009 on Measures to Introduce Simplified Procedures for Obtaining Permits for Individual Housing Construction/Rehabilitation and Approval of Plans by Authorized Bodies Based on the "One-Stop-shop" Principle
- Resolution of the President No. PP-1683 of 11 January 2012 on Urgent Measures to Implement a Multi-tranche Financing Programme for the Project Development of Housing Construction in Rural Areas, with the participation of the Asian Development Bank (ADB)
- Resolution of the Cabinet of Ministers No. 54 of 25 February 2013
- Resolution of the Cabinet of Ministers No. 285 of 7 October 2015 on Measures to Further Improve the Procedures for Granting Land Plots through the Competition for Entrepreneurial Activities and Procedures for Obtaining Building Permits.

Housing policy is also implemented through the adoption of targeted State programmes, such as the State Programme on Construction of Model Detached Housing in Rural Areas. However, these programmes have been designed without clear eligibility rules and comprehensive research on the demand side, frequently because of a lack of reliable data. The existence of numerous legal acts and special measures thus make it almost impossible for current housing policy to be taken forward as an integrated and long-term Government strategy.

**Land legislation**

With some limited exceptions described later in this chapter, land is the only productive asset in Uzbekistan that cannot be owned privately by individuals or collectives. Uzbekistan and Tajikistan are the only former Soviet States that decided not to transform their State-owned and -managed land policy to private land ownership within a market economy. The legal foundation of land tenure in Uzbekistan is provided by the Constitution, the Land Code and the Civil Code, as well as other legislation.

The Civil Code (No. 257-I of 29 August 1996) determines ownership of land for citizens and legal entities (Article 188), while the Land Code regulates the basic principles of land use in the country.

According to the Land Code (No. 598-I of 30 April 1998), land is State property, apart from the few cases defined below. It is national wealth, to be used efficiently and protected by the state. It is not subject to purchase/sale, exchange, donation or use as collateral, except where exempted by legislation (Article 16).
Land privatization is possible, therefore, only in a limited number of cases. Article 18 of the Land Code establishes that businesses and individuals may own land only in the manner prescribed by law, where trade and services facilities have been privatized along with the land on which they are located. Privatization of these types of facilities has taken place since 1995, recognizing that the land, and the business built upon it, are integrated and can therefore only be sold as a single entity in the secondary market. However, the related right of inheritable possession of a land plot on which an individual house is located is very similar to right of ownership, because it implies the possibility of transfer of the title by inheritance. However, such quasi-ownership of land does not provide the legal conditions for a fully functioning land market.

Article 18 also allows acquisition of property rights to land by diplomatic missions and equivalent international organizations, foreign legal entities, and individuals during the acquisition or construction of buildings or parts of buildings, together with the land plot on which they are located. In all other situations, land belongs to the State and is occupied via long-term leases from the State, again providing obstacles to the development of a full land market.

Allocation of land for long-term use, with the possibility of extending the lease agreement for an unlimited time, is granted by *khokimiyats*. Rules allocating land plots for construction are defined by the Urban Development Code in Article 34 (The Master Plan of a Settlement), Article 37 (Town Planning Map), Article 53 (Town Planning Requirements for the Use of Land in the Settlements), and Article 56 (Servitudes and Title Encumbrances in Implementing Town Planning Activities).

In accordance with the Civil Code and the Land Code, the Oliy Majlis passed a number of laws, Presidential Decrees and other resolutions relating to land, property and land use, and more specifically:

- On the procedure for solving issues of the administrative-territorial arrangement in the Republic of Uzbekistan
- On the agricultural cooperatives (*shirkats*)
- On farm enterprise
- On environmental protection
- On protected areas
- On the State cadastres
- On the State land cadastre
- On mortgage

Land use also is regulated by numerous Resolutions of the Cabinet of Ministers, including:

- On the order regulating the selling of trade and service sector facilities to private ownership, along with the land on which they are located, and selling the land to lifetime inheritable possession (Resolution No. 126 of 11 April 1995)
- On the State land cadastre in the Republic of Uzbekistan (Resolution No. 543 of 31 December 1998)
- On the approval of the regulation for land monitoring in the Republic of Uzbekistan (Resolution No. 496 of 23 December 2000)
- On measures to implement the concept of farm development for the years 2004-2006 (Resolution No. 476 of 30 October 2003)
- On measures for further development of leasing in agriculture (Resolution No. 486 of 5 November 2003)
On the approval of the procedure for indemnity to citizens and legal persons in connection with land seizure for State and public needs (Resolution No. 97 of 29 May 2006)

On the approval of the regulation on individual housing construction (Resolution No. 272 of 30 December 2006)

On measures to improve the procedure for granting land for the implementation of urban development activities and other non-agricultural purposes (Resolution No. 146 of 25 May 2011)

On additional measures to improve the provision of land via competitive tendering to businesses and individuals for entrepreneurial activity (Resolution No. 147 of 25 May 2011)

On measures to radically simplify the system of granting land for the implementation of urban development activities and other non-agricultural purposes, as well as permitting construction of facilities (Resolution No. 54 of 25 February 2013)

On the approval of the regulation on the procedure for granting land plots to the participants of special industrial zones (Resolution No. 234 of 26 August 2013)

On improving the procedure of State registration of rights to real estate (Resolution No. 1 of 7 January 2014).

Such a broad regulatory framework might be counterproductive, however, because it contains inconsistent regulations, among other issues. Further, the World Bank has reported that “the registration of property was not clearly defined in the form of due process and is regulated by several codes (Land Code and Civil Code), resolutions of the Cabinet of Ministers, organizational instructions and orders, many of which are outdated and contradictory.”

B. Institutional framework for housing, urban and rural development, and land use

Institutional framework for housing

The responsibility for housing sector policy development is vested in multiple agencies, with no dedicated Ministry or agency handling such matters.

In 2000 the Ministry of Public Service was abolished and the Uzbek agency “Uzkommmunhizmat” was established, entrusted with coordinating reforms of the communal services sector. Uzkommmunhizmat is responsible for development and implementation of public policy; development of projects, programmes, policies, rules and regulations; assistance in attracting investment into technical re-equipment and modernization; and provision of metering and monitoring devices. The agency may adopt legal acts that are binding upon Ministries, departments, economic authorities, khokimiyats, enterprises, institutions, organizations, officials and citizens.

The structure of Uzkommmunhizmat includes:

- National training and methodological normative and engineering centre Uzkommunukuvrashkilotchi
- Department for operations of the inter-regional Tuyamuyun-Nukus water pipeline

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• Department for operations of the inter-regional Tuyamuyun-Urgench water pipeline
• Department for operations of the inter-regional Damhodzhin water pipeline
• Department for operations of the inter-regional water pipelines of Jizzakh viloyat
• Department for operations of the inter-regional water pipelines of Tashkent viloyat
• Engineering company Uzbekkommunalloyihakurilish Ltd., for construction of the facilities of Uzkmunnkhizmat

The Ministry of Economy and its territorial divisions promote the development and implementation of targeted programmes. In particular, it governs programmes for specific housing sector investment projects, as well as those dealing with development of engineering, communication and social infrastructure, construction and other sectors that directly relate to developing the housing market. Local authorities generally implement tasks set at federal level and do not make significant changes to the State programme. They also do not implement their own programmes because of limited financial resources.

After Uzbekistan gained independence, housing sector reform started as part of the general transition to a market economy and has progressed in phases. In the first phase (1991-1997), a regulatory framework for reforming the sector was established: Housing was privatized, management was decentralized, tariffs were partially adjusted to the market economy, and the social security system was created. The current phase of reform started in 2005, developing PHOAs and establishing a competitive market for housing services.15

Until 2000, management of multi-family housing stock was carried out by public housing departments and trusts, with maintenance provided by 450 public housing maintenance organizations. In 1999, the adoption of the first law on HOAs started the transition of management and maintenance of apartment buildings from State organizations to homeowners. By 2001, State housing organizations were almost completely eliminated, replaced by about 2,000 HOAs as the dominant form of management and maintenance of apartment buildings. HOAs averaged 12-15 multi-apartment buildings, but often the HOA would cover 40-50 houses. In such huge “multi-building” HOAs, individual property owners had few opportunities to make decisions on management of their building or to supervise the activities of the HOA Board. In addition, the level of maintenance by HOAs was generally quite low, due not only to low payments from owners but also to the associations’ lack of technical equipment.

After the adoption of the 2006 Law on Private Homeowners Associations, a vigorous transformation of “multi-building” HOAs into new single-building PHOAs began. By October 2009, these PHOAs accounted for 40 per cent of the total number of associations in the capital alone. A Presidential Decree approved a procedure simplifying the process of State registration for single-building private HOAs that had been established by apartment owners choosing to exit multi-building HOAs. However, efforts are still needed to determine the optimal number of apartment buildings in an HOA, balancing cost effectiveness with enabling homeowners to actively participate in the management of their property, influence HOA operations and monitor expenditures for maintenance of common property.16

The main utility companies are State-owned, usually wholly so. Only a small number are joint stock companies with a majority State share of 95 per cent or more; these include Uzbekneftegaz (gas company), Uzbekenergo (energy company), “Suvokova” in Andijan viloyat, “Toshvilsuvokova” in Tashkent viloyat (water suppliers), “Issiklikmanbai” in Bukhara viloyat, “Kommunallyk issiklik Ori” in the Republic of Karakalpakstan, “Toshissiklikmarkazi” in Tashkent city, “Khorezm issiklik Manbai” in Khorezm viloyat (organization of heat supply), and others. The Law on Natural Monopolies (Law No. 398-I of 24 April 1997) establishes Government regulation of water and sewerage services as well as production and distribution of electricity and heat. Tariffs for water supply, heating (including central heating and hot water) and sewerage are set by Government price regulation authorities, as required by the: 1) Regulation on Procedures for Setting, Approval and Establishment of Regulated Prices (tariffs) for Goods (works, services) and the State control over their Application (Resolution of the Cabinet of Ministers No. 239 of 28 October 2010); and 2) Regulations on the Procedure for Setting of Tariffs and Introduction of a Limit on the Level of Utilities’ Profitability (Resolution of the Ministry of Finance of the Republic of Uzbekistan, Ministry of Economics of the Republic of Uzbekistan, Uzbek Agency "Uzkmuhnikhizmat" No. 2198 of 19 February 2011).

Housing and communal service-related issues are the subject of more complaints than any other type of service. For example, in 2013, 59.1 per cent of 4,398 complaints received by the State Committee on Privatization, De-monopolization and Development of Competition were about public utilities. According to the Committee, 1,300 concerned supply of natural gas; 525 were about electricity supply; 280 related to the work of PHOAs, including operation of elevators; 213 to heating; 104 to water supply; 69 to hot water supply; and 21 to municipal waste collection services.17

**Institutional framework for urban development**

State management of urban development is implemented by the Cabinet of Ministers, local public authorities (Council of Ministers of the Republic of Karakalpakstan and khokimiyats of viloyats and Tashkent city), and a special authorized State body, the State Committee on Architecture and Construction (Goskomarkhitektstroy).

The structure of Goskomarkhitektstroy includes:

- State Committee of the Republic of Karakalpakstan for Architecture and Construction
- Head departments of architecture and construction of viloyats and Tashkent city
- Departments (head offices) of architecture and construction of cities and viloyats
- Local Departments of the State Expertise
- Local inspectorates of State architectural and construction supervision
- Local consulting centres for competitive bidding and pricing
- National Centre for Standardization and Certification in Construction
- Centre for Economic Reform and Pricing in Capital Construction
- Information and innovation centre AQATM

One of the most important tasks of Goskomarkhitektstroy is to standardize construction materials, products and designs. It monitors compliance with town planning rules and standards for the planning and building of cities, villages and other territories, monitoring planning and design with regard to conservation of cultural heritage and maintenance of national and cultural traditions. Goskomarkhitektstroy likewise coordinates and monitors the progress of reforms in capital construction.

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17 State Committee on Privatization, Demonopolization and Development of Competition.
All parties involved in construction must comply with regulatory requirements. Compliance control is carried out by the construction customer, the Design Institute, and by inspection of architecture and construction supervision.

The main functions of inspection of architecture and construction supervision are to ensure monitoring of compliance with urban planning legislation, urban development rules and regulations, and technical requirements, as well as to monitor quality of construction.

**Institutional framework for land use**

Land management is carried out by public authorities at different levels, by allocation of land for agricultural and other activities; building of facilities; State control over land use and protection of land; maintenance of the land cadastre; and implementation of land monitoring. The allocation of land for possession, use, rent and ownership is carried out by the Cabinet of Ministers, khokims (governors) of viloyats, Tashkent city, districts and other cities.

Documentation on selection and allotment of a land plot is prepared and then agreed by authorities. It is then submitted for approval to the district (or city) khokim, territorial subdivisions of Goskomarkhitektstroy, as well as self-supporting, State-owned, enterprises that are part of Goskomzemgeodezkadastr.

Goskomzemgeodezkadastr, which merged three former land management authorities, was established by Presidential Decree “On establishment of the State Committee on Land Resources, Geodesy, Cartography and State Cadastre” dated 15 October 2004, Number UP-3502. However, research shows that a degree of overlap still exists; the property cadastre, for example, is managed separately by different organizations at local and national levels. Overall components include:

- At local level, the land cadastre is managed by land departments, while the buildings and structures cadastre is maintained by cadastral services
- At central level, the National Centre of Geodesy and Cartography keeps a central database on buildings/structures and registered rights, while the institute Uzgiprozem maintains the land database

The tasks of Goskomzemgeodezkadastr include:

- Implementation of State policy on sustainable use of land resources, regulation of land relations, land management and land monitoring, and conservation, improvement and restoration of soil fertility
- Development and implementation of Government programmes to improve soil fertility and sustainable use and protection of land
- Implementation of State control over management and protection of land
- Management of geodetic and cartographic activities
- Organization of State geodesic supervision
- Coordination of the activities of government and local public authorities relating to State cadastres
- Maintenance of the State Land Cadastre, State Cartography and Geodesy Cadastre, State Cadastre of Buildings and Structures, as well as the Unified System of State Cadastres

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Implementation of State registration of rights to immovable property and transactions involving such property

Territorial State-owned enterprises and the land cadastre for real estate have introduced a “one-stop shop” for the provision of cadastral and registration services. However, continued manual processing in cadastral offices, along with the persistence of paper records and low IT capability, have combined to create a hybrid situation: Only an estimated 7 per cent of documents are in electronic form, and online applications through the Uzbek Land Register portal still need to be matched up with paper documents submitted by the applicant through the postal system.

Goskomzemgeodezkadastr works to meet targets set by the Cabinet of Ministers and submits an annual national report about the condition of land resources, which contains an in-depth analysis of both the conditions and the changes since the previous annual report.

Goskomzemgeodezkadastr provides both free and fee-based services. Since the cadastre was introduced in 1996, it has been self-financing for all intents and purposes; although its financial situation is broadly stable, evidence gathered in on-site interviews indicates that concerns are growing that future financing will not be sufficient to cover the cost of maintenance of cadastral and registration databases, meet IT upgrades, or repay loans already made to invest in IT capabilities.

In all, however, it must be emphasized that having a single national authority responsible for granting the rights and registration of land use is a very unusual practice. A risk of conflict of interest exists in cases where registration of rights depends on the use of land. In addition, four separate registers, for land, residential buildings, non-residential buildings and mortgages, can easily create overlaps and do not contribute to increased transparency in governance.
A. Housing trends and patterns

Urbanization as a driving force for housing construction

Housing construction is greatly influenced by the country's population growth and rate of urbanization. As noted in Chapter I.D, Uzbekistan's population has grown steadily over the past 60 years. Until the 1990s, annual population growth rate averaged 3.4 per cent and then declined to 1.7 per cent (see Figure X), mostly as a result of emigration and a falling birth rate. Nonetheless, given this trend, the population is expected to increase by another 6 million by 2030. This creates a need for more housing, land for construction, and related infrastructure services.

Figure X

Population growth rate

Source: State Committee on Statistics.

High potential housing demand also is arising from the large proportion of young people in the population and, consequently, young families.

Urbanization trends have led to accelerating urban housing construction, and since 2010 the urban housing area has exceeded rural housing area (see Figure XI). The share of rural housing stock in 2012 decreased to 47.2 per cent, compared to 60 per cent in 2000. One reason for this decrease could be attributed to administrative-territorial reforms that resulted in the conversion of large rural settlements into urban settlements, or to the fact that in rural areas most houses are never registered; in addition, in rural areas people pay land tax that depends on the acreage of land, not area of housing.
Because of rural-urban migration, since 2009 the urban population has exceeded that in rural areas. Again, this increase also is due to the administrative-territorial reforms that re-categorized large rural settlements as urban settlements.

However, overall the urbanization rate in Uzbekistan remains slower than in other countries with economies in transition. This has been carefully managed by the Government, which prioritizes rural development and especially improvement of housing conditions. (For more information about the State Programme on Construction of Model Detached Housing in Rural Areas, see Chapter IV).

**Privatization of housing stock**

Privatization of State-owned housing stock began in 1993, based on the Law on Privatization of State-owned Housing Stock (Law No. XII of 7 May 1993. This law defines the legal procedures, as well as the economic and social framework, for housing privatization in Uzbekistan. It states that the purpose of privatization is to give citizens the right of ownership, enabling them to invest in maintenance of their house and real estate, and to freely possess, use and dispose of their housing.

Privatization resulted in a huge increase in home ownership in Uzbekistan, from 41 per cent to 98 per cent. Because it took place at nominal prices, families were encouraged to privatize quickly. Privatization was only of dwellings, however, not land; the land was permanently leased, but not sold, to homeowners. In all, privatization of State-owned apartments had a positive impact in establishing the housing market, granting ownership to families, and ensuring security of tenure. However, it did not succeed in establishing a functioning management and maintenance system. Future homeowners often were not aware that, along with their apartments, they were responsible for privatized portions of common areas, maintained by local housing agencies until new legislation was passed in 2000.
General characteristics of the housing stock

Uzbekistan has about 5.7 million dwellings, with a total area of about 457.9 million m². In 2006, the housing stock was 49.7 per cent larger than in 1991. However, as already highlighted, in urban areas the increase in housing stock is mainly due to administrative-territorial reforms, rather than to an increase in construction.

Indicating a further uptick in recent years, in 2012, 30 per cent more houses were commissioned than in 2007. In 2013, 8 million m² out of 10.7 million m² of housing commissioned were in rural areas. In all, this high rate of rural housing construction is attributable to the aforementioned Government policy supporting rural housing provision.

Detached houses predominated, representing about 70 per cent of total dwellings. Even in cities, detached houses account for a significant proportion of total residential area, while apartment buildings account for only 30 per cent.19 Because family sizes in Uzbekistan are rather large (on average, 5.3 people), the most common model of apartment comprises four rooms, and covers 63.5 per cent of multi-apartment housing stock.

Apartment buildings are primarily built from reinforced concrete and brick. Given the high seismicity of the country, regulations restrict the height of buildings to four or five floors (58.4 per cent of multi-apartment housing stock). A small number of high-rise buildings have been built in Tashkent through special projects.

Most housing stock (60 per cent) was built between 1971 and 2006. Around 30 per cent is between 30 and 50 years old, 30 per cent is older than 50 years, and the rest (41 per cent) was constructed after the 1990s (see Figure XII).

Figure XII
Age of the housing stock

![Pie chart showing the distribution of housing stock by age](chart.png)

Source: State Committee on Statistics.

Housing providers

Construction of residential houses is now mainly carried out by private companies, which build both

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multi-storey and detached private houses for sale to any buyer. Previously, detached private houses were mostly constructed by families themselves, or by hiring workers.

Almost all investment in housing (99 per cent) is through private funds, with only 1 per cent from State funds. Further analyzed, private financing consists of 81.6 per cent of funds from individuals, 11.5 per cent from bank loans, and 5.8 per cent from the private sector. The annual rate of housing construction stands at 1.9 houses per 1,000 inhabitants, slightly higher than in Ukraine (1.420) but less than in Belarus (5.5-6.221); Kazakhstan (3.3); and the Russian Federation (5.522).

The comparatively low rate of housing construction by the private sector may be explained by land ownership remaining with the State, which in turn creates challenges in raising funds from the banking sector, capital markets and individuals. Another factor constraining the development of private housing construction is low consumer demand in certain areas. For example, abandonment of small towns and villages is leading to house prices in these areas that are lower than the cost of construction. According to local experts, the cost of new and secondary housing is currently equalizing, which is expected to stimulate detached housing construction.

**Forms of housing tenure**

As already highlighted, the heavily predominant form of tenure in Uzbekistan is private ownership, which is nearly universal. On 1 January 2013, the State owned 3,366.3 thousand m², or 0.8 per cent, of the total housing stock (3,130.2 thousand m² in urban areas and 236.1 thousand m² in rural areas). Multi-apartment buildings are owned through condominiums, and the share of housing owned by cooperatives is negligible. However, a very high homeownership rate, along with an almost non-existent rental sector, appears to reduce housing choices in the market for different income groups, and to limit population mobility.

In accordance with Article 19 of the Land Code, citizens are allocated plots for heritable permanent use, for detached and condominium housing construction and transactions. State housing stock, under the jurisdiction of local authorities or State-owned enterprises and organizations, is available to certain categories of citizens based on their tenancy agreement.

**Accessibility for persons with disabilities**

Persons with disabilities face considerable difficulties in access in many buildings in Uzbekistan. New regulations for the design of residential buildings, as well as other private and public buildings, will need to include accessibility measures for persons with disabilities, based, for example, on the concept of universal design23 or other internationally recognized building standards for disabled access. According to national standards (*Public buildings and facilities*, No. SHNK 2.08.02-09), passenger

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22 Ibid., footnote 20.

23 “Universal design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability”. Source: Centre for Excellence in Universal Design, “What is Universal Design”, 9 June 2015. Available from http://universaldesign.ie/What-is-Universal-Design/.
elevators currently are provided only in public buildings with more than four stories. They are also provided for senior citizens in special residential buildings of 8 metres or higher, and for wheelchair users in buildings of 3 metres or higher. However, a significant share of existing buildings are lower than five floors because of the high seismicity of the region, meaning that most housing stock does not have elevators.

B. Housing and living conditions

Indicators to measure the quality of living conditions include amount of m² of living space per person, number of households per dwelling, and number of persons per room, all of which directly relate to physical and mental health. However, in the absence of an internationally agreed minimum level of housing consumption and crowding, these indicators vary widely from country to country, depending on living standards, culture, climate and other factors.

The United Nations defines overcrowding as the proportion of families with more than three members per room. For its part, the European Commission (EC) considers a household overcrowded if it does not have:

1. One room for the household generally
2. One room per couple in the household
3. One room for each single person aged 18 or more
4. One room per pair of single people of the same gender aged between 12 and 17
5. One room for each single person aged 12-17 and not included in the previous category
6. One room per pair of children younger than age 12

While it is impossible to assess the level of crowding in households in Uzbekistan according to EC standards, but some conclusions can be drawn. The average area of an apartment in Uzbekistan is 79 m², slightly more than in Russia and Ukraine (see Figure XIII). However, the larger family size in Uzbekistan already highlighted is more than double the family size in Ukraine (2.5 people/family) or in Russia (2.7 people/family). Therefore, despite a larger apartment size, the area per person remains low. This is further confirmed by an indicator of an average dwelling area per person (Table 2).

Table 2
Average dwelling area per person
(Square metres)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nationwide</td>
<td>12.4</td>
<td>12.9</td>
<td>13.8</td>
<td>15.0</td>
<td>15.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Cities</td>
<td>12.9</td>
<td>14.0</td>
<td>14.6</td>
<td>15.4</td>
<td>15.4</td>
<td>15.4</td>
</tr>
<tr>
<td>Rural areas</td>
<td>12.1</td>
<td>12.1</td>
<td>13.3</td>
<td>14.5</td>
<td>14.5</td>
<td>14.5</td>
</tr>
</tbody>
</table>

Source: State Committee on Statistics.

The area of housing per person officially reached 15 m² in 2010, an increase of 21 per cent over 1991 figures, but has since remained unchanged. In estimating this, it is necessary to factor in houses abandoned due to migration; if this empty housing stock is subtracted from the total, the area per person drops significantly. Unfortunately, no public information is available on the proportion of vacant and abandoned houses in the country.

Another indicator used to analyze the availability of housing is the number of dwellings per 1,000 inhabitants. In Uzbekistan, this figure stands at 189.1 dwellings per 1,000 inhabitants, which is low compared to other CIS countries (Armenia, Azerbaijan, Belarus, Georgia, Kyrgyzstan, Russia, Tajikistan, Ukraine).  

Thus, a serious housing shortage can be identified, with overcrowding and unmet housing demand. As the above data indicate, the current rate of housing commissioning is not keeping pace with population growth, as the following sub-section elaborates.

C. Need and demand for housing

Assessment of housing need and demand represents a useful tool for developing housing sector policies, decision making and resource allocation, at both national and local levels.

Housing need

At the international level, neither a single definition of housing need exists, nor does a unified method for assessing housing demand. Different countries thus develop their own standards and methodologies.

A widely used method for assessing housing need compares actual housing consumption with the State housing standard of dwelling area per person. In Uzbekistan, different legislation contains different minimum standards for housing consumption:

- [Not less than] 9 m² per person for tenants in municipal housing stock
- [Not less than] 16 m² per person, in accordance with the Housing Code
- [Not less than] 20 m² per person for persons using a wheelchair

The actual average rate of national housing consumption (14-15 m² per person) is thus slightly below the norm established by the Housing Code (16 m² per person). A further breakdown of the data shows that 32.7 per cent of housing has less than 12 m² of living space per person; 35.9 per cent between 12 and 20 m²; and 31.4 per cent more than 20 m². According to these data, therefore, at least a third of the population in Uzbekistan lives in dwellings with an area below the Housing Code norm.

Data on level of housing provision (15 m² per person) and the number of dwellings per 1,000 inhabitants (189.1), allow only for a rough estimate of housing need in Uzbekistan. Taking into consideration the requirement to have at least 16 m² per person, then 48 million extra m² of housing would be needed. Moreover, if the Government were to increase the living space norm to that of, for example, Kazakhstan (17.9 m² per person and 254 dwellings per 1,000 people), an additional 66 dwellings per 1,000 people – or about 2 million dwellings in total (about 145 million m²) would be required. Based on rates of housing construction in Uzbekistan over the last decade, it would take about 10 more years to provide this housing. However, it should be noted that this is a very rough estimate, not taking into account factors such as vacant housing and demolished or reconstructed houses.

Regardless, policymakers will need to look beyond the numbers to the social and economic profiles of people in housing need. The Government already has identified priority groups that can receive housing support, including low-income citizens in apartments with areas under the established norm;


27 Resolution of the Cabinet of Ministers of 28 June 1994 on Regulation on Municipal Housing Fund of the Republic of Uzbekistan.
low-income persons with disabilities; veterans of the Second World War and the Chernobyl disaster; and others.

Applications from families in need of better housing are registered by khokimiyats. At the time of writing, no data were available on these applications. The key issue of a lack of information in this regard also has been highlighted by the Committee on Economic, Social and Cultural Rights of the United Nations Economic and Social Council. In its June 2014 report on Uzbekistan, the Committee expressed its concern that “…no data have been provided as to the extent of homelessness and forced evictions, and the number of persons on waiting lists for municipal and social housing.”

If no data are available, then identifying the required data and the establishment of mechanisms for their collection, processing and periodic monitoring will need to be included in a national plan for the housing sector. Data that should be collected and processed locally may include, but are not limited to, the following:

- Number of families applying for housing and their composition, number of children, employment status and income, number of persons with disabilities
- Living conditions of applicants, such as overcrowded, unhygienic or unsafe housing
- Data on housing prices and market rents for various regions and types of housing

Collection and analysis of the above data will allow a more substantive evaluation of housing need, and result in a more informed Government response.

In turn, with a clear picture of local housing need, along with social and economic profiles of families in need, the Government can then decide on appropriate priorities and policies to address the challenge.

At the same time, housing policy objectives differ from country to country. For example, in the EU social housing differs in three main aspects, namely, tenure, provision and beneficiaries. Two main models have been found to define beneficiaries: the universal model and the targeting model.

Under the universal approach, often used in Nordic countries, social housing is open to the whole society. In the targeting model, however, social housing is opened for those households that cannot afford housing of a defined standard; this approach is common in European countries operating under austerity measures and requiring more control on public spending.

For Uzbekistan, the application of a targeting model is recommended. To apply such an approach, the Government will need to establish minimum acceptable standards for adequate housing and set an income limit as a ceiling. Within this group, further targeting also may be needed, which may include the most vulnerable groups, such as persons with disabilities, orphans, families with many children, or single-parent families. Other possible target groups include young people, young professionals and public-sector employees. It should be noted, however, that the targeting model has higher

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administrative costs compared to the universal model, and can lead to preferential treatment and corruption if not well managed.

**Housing demand**

Clearly, demographic and economic changes, both of which affect housing supply and demand, are key factors underlying the development of the Uzbekistan housing market. Over the past 20 years, housing stock has increased by nearly 180 million m², or about 1.2 million new dwellings. Average housing construction has stood at 8.9 million m² per year, or 59.7 thousand houses. No official data exist on housing demand not satisfied by the market, and no market surveys or data appear to be available on housing transactions. This makes it impossible to fully analyze the state of satisfaction of housing demand, its characteristics and preferences.

As already noted, however, the population of Uzbekistan is expected to increase by 6 million in the coming decades, requiring an additional 100 million m² of housing per year, the equivalent of about 67,000 new dwellings annually. If the current housing shortage of about 138 million m² is added to this, 150,000 dwellings will need to be built per year – which would double existing production.

Actual housing demand also can be assessed by the dynamics of house prices. In 2013 house prices in Tashkent increased 20 per cent over 2012. If this is accurate, it also appears to show a large increase in housing demand, and possibly a reduced market. Thus, it is evident that the housing market faces considerable challenges to satisfy actual and future housing demand.

In summary, the major challenges to address housing needs in Uzbekistan are as follows:

- Affordable housing has issues of both supply and demand. On the supply side, market-based housing provision has not satisfied increasing housing demand in the largest cities, and the public-sector housing supply remains insignificant. The private housing market is constrained by a lack of land markets, insufficient financing from the banking sector, and lack of Government incentives.
- The very high rate of home ownership limits alternative housing solutions for different demand categories.
- Housing affordability is constrained by the low income level of many households.
- A lack of data prevents the Government from having a clear picture of the housing situation and inhibits the development of policies and programmes to address the housing needs of different groups.
- National and local authorities do not cooperate efficiently, especially in exchanging information and data.

**D. Housing stock management and maintenance**

**Housing management**

On average, every condominium owners association serves six apartment buildings, or about 192 flats; the number of single-building associations stands at 1,416 or 29 per cent of the number of condominium owners associations.

In Uzbekistan, no standard number of flats that an association should administer has been determined. Small numbers of condominiums generally have better communication between managers and homeowners, but those with multiple residential buildings have financial advantages because of
economies of scale. However, single building-based associations have the opportunity to turn to management companies, whose market is rapidly developing in the country, and to contract appropriate services, thus ensuring quality and cost savings. International practices offer different examples of condominium associations, with experts recommending that small associations can be managed more efficiently and better engage homeowners in decision making. Thus, national and local authorities in Uzbekistan will need to analyze the effectiveness of larger associations vs. small ones and develop guidelines accordingly.

Overall, management of condominiums is seen as a good opportunity for increasing employment in the country. In 2013, 359 management companies and 234 public service organizations were established in the viloyats. According to national experts, condominium owners associations employed more than 208,000 people that year, an increase of 544 over 2012. Supporting housing managers with training courses, as well as providing contract models or standards for physical asset management and relations between condominium owners, can positively affect the quality of services.

**Housing maintenance**

Improving the common property of apartment owners, including facades, roofs, stairs, water supply and sewerage, requires significant funds. The example of PHOA Nukus Kommunal (see Box I) identifies good practices in assembling the necessary budget to invest in common property. Nevertheless, it can be difficult for many families to implement expensive repairs with no external assistance.

The average annual per-capita income in Uzbekistan is UZS 3,163,600 (USD 1,509.7), which corresponds to a monthly income for the household of UZS 844,400 (USD320). Based on this level of income, affordable monthly payments to improve living conditions are in the range of UZS 170,000-200,000 (20-25 per cent of monthly income), which corresponds to an approximate investment of UZS 9 million (calculated as amortization of a five-year loan with a rate of about 8 per cent per annum).

As noted, however, households living in privatized apartment buildings tend to have below-average income. Homeowners with significant assets (they own their apartments) but low cash flows represent a common issue in countries with economies in transition. This lack of apartment-owner financial resources then results in considerable difficulties with regard to overhaul and modernization of privatized apartment houses.

National experts state that there are generally few serious problems with the maintenance of condominiums. Houses with a “wear degree” of 50 to 80 per cent comprise only 3.3 per cent of the total, and those with a wear degree of more than 80 per cent account for less than 1 per cent of the total. Nonetheless, research and assessment show that a serious lack of maintenance and capital investment has caused housing dilapidation (see Table 3).

From 2002 to 2010, a State programme to overhaul pre-1991 apartment buildings repaired more than 22,000 multi-apartment residential buildings. It included capital repairs covered by Government funds, such as repair of utilities networks (heat supply, water supply, sewerage) and roofing. Funding for the programme was 70 per cent from the State budget, and 30 per cent from other sources, including:

30 The calculation is based on the OECD equivalence scale, which assigns the value 1 to the first family member, 0.7 for each additional adult and 0.5 for each child in a family of 5 (the national average family size in Uzbekistan).
• Funds received from owners and tenants of residential and non-residential properties, to pay for the cost of operating and maintaining the building

• Funds received from owners of individual garages and similar structures located on the land plot transferred for permanent use

The availability of Government funds for housing improvements represents a positive development; however, State budgets should not be the only source of housing improvement finance. Homeowners are the primary beneficiaries of these improvements and should be encouraged to invest in them. If the homeowners lack financial resources, bank loans should be a potential source of finance. Renovation should be combined with energy-efficiency investments, given that reduced energy costs will make loan repayments more affordable.

Table 3

Depreciation of the housing stock
(Percentage of total area)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 20 per cent</td>
<td>58.1</td>
<td>59.2</td>
<td>61.2</td>
</tr>
<tr>
<td>From 21 to 40 per cent</td>
<td>28.9</td>
<td>28.1</td>
<td>27.1</td>
</tr>
<tr>
<td>From 41 to 60 per cent</td>
<td>7.6</td>
<td>8.2</td>
<td>7.5</td>
</tr>
<tr>
<td>More than 60 per cent</td>
<td>5.3</td>
<td>4.5</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Source: State Committee on Statistics.

Major challenges in the area of condominium management and maintenance are summarized below:

• Lack of knowledge of homeowners on their responsibility to manage and maintain common property

• Low income of privatized apartment owners

• Dilapidated housing due to a lack of maintenance during the Soviet era, as well as after privatization;

• High investment costs for capital repair because of a lack of previous maintenance

In conclusion, the housing management legal framework provides a good basis for condominium management. However, while the Government works to finalize regulations related to management standards, the current legislation needs to be more fully implemented, especially with regard to privatized housing stock. Private management associations and PHOAs require further training and guidance, as well as opportunities to exchange experiences (for example, the case of PHOA Nukus Kommunal) and disseminate best practices to improve service quality. Capital repairs of housing stock should be particularly targeted, and the Government will need to develop policies to support housing renovation by PHOAs.
Box I
Management of apartment buildings: example - PHOA Nukus Kommunal

Nukus Kommunal is the name of a single-building PHOA in Tashkent. This nine-storey building was built 40 years ago, has 136 apartments and used to be called the “Titanic” because of repeated water leaks in the basement. Ms. Zemfira Rasulova, chairperson of the HOA, says that apartment owners have invested UZS 6 million in the repair of the piping networks, an effort that was accomplished without external support. The monthly fee for house maintenance is UZS 300 per m², with an average of UZS 19,600 per month levied for an apartment of 63 m². The monthly budget of the association is UZS 2.2 million, of which UZS 500,000 is spent on maintenance of elevators, UZS 400,000 on electricity costs, and about 30 per cent on janitors, cleaners, plumbers and management. Any remaining funds are used for repairs; currently there have been no delays in monthly payments. Residents are reportedly satisfied with their partnership and the improved state of the house.

Source: Interview with Ms. Zemfira Rasulova, Chair of PHOA Nukus Kommunal.

Photo I
Apartment building of PHOA Nukus Kommunal

Source: D. Andoni, July 2014

E. Energy efficiency of the housing stock

In Uzbekistan, buildings account for half the nation’s total energy consumption (17 million tons of oil equivalent per year). Residential buildings are responsible for 33 per cent of primary energy and 46 per cent of final energy consumption, including 60 per cent of the final consumption of thermal energy, 18 per cent of final electricity consumption, and 54 per cent of the final consumption of natural gas.

Because of outdated building standards, obsolete heat-insulation materials, inadequate engineering designs and inefficient heat supply systems, energy consumption in buildings is 2 to 2.5 times higher
in Uzbekistan than in most developed countries.\(^\text{31}\) For example, in 2011 energy consumption by living space was 423 kWh per m\(^2\) per year, twice the average for Europe and close to that of the United States. Nearly 50 per cent of heat escapes through inefficient windows, doors, ceilings and walls, leading to energy consumption of 320 to 690 kWh/m\(^2\) per year.\(^\text{32}\) Enhancing energy efficiency has benefits at macro and micro (household) levels, including reducing of energy from non-renewable sources; diminishing national dependence on external sources, thereby strengthening economic and political stability; increasing employment; reducing household energy bills and improving living conditions; and protecting the environment. The introduction of “green” buildings in Uzbekistan would save more than 8 million tonnes of oil equivalent – almost half the actual energy consumption – and reduce annual costs by USD 2 billion.\(^\text{33}\) Losses from excessive energy consumption in buildings, as well as a large potential for energy savings, thus necessitate urgently improving building energy efficiency in Uzbekistan.

A joint project of the United Nations Development Programme, the Global Environment Facility (GEF) and Goskomarkhitkektststroy is working to support the Government in improving the energy efficiency of public buildings (see Box II). It aims to reduce energy consumption and associated greenhouse gas emissions in public buildings, particularly in the health care and education sectors, by improving building standards, demonstrating integrated building design approaches, and developing the capacity of local specialists in design, construction and maintenance.

The project has recommended revisions to 9 building codes to include energy efficiency standards, which were subsequently adopted by the Government.

As part of the project, national experts, construction specialists and students were trained in the application of newly adopted energy-efficient building codes. Energy audits of four rural schools and two rural clinics in four regions also were carried out, while eight energy-efficient demonstration buildings were piloted.\(^\text{34}\)

Investments to improve the energy efficiency of buildings are an opportunity to increase employment. The goal thus is to generate 15,000 “green” jobs by 2020, and up to 120,000 by 2050. The economy in Uzbekistan will benefit still further from the development of associated industries, as well as increased production of equipment and materials for “green” construction.

However, despite these legislative and institutional efforts, considerable challenges remain. In the spring of 2014, the Centre for Economic Research estimated a USD 1.1 billion loss in housing stock caused by high power consumption due to a lack of energy-efficient “green” construction.\(^\text{35}\)

According to UNDP research,\(^\text{36}\) a lack of incentives and mechanisms for the wide application of “green” construction principles represents the main obstacle to adoption of “green” buildings and


improvement in energy efficiency. In fact, high energy consumption is not only a feature of old and derelict buildings – new construction still uses obsolete methods in building, maintenance and operation of buildings.

Box II
UNDP/GEF project “Promoting Energy Efficiency in Public Buildings in Uzbekistan”

**Objectives:**
I. Strengthen standards for both new and re-constructed buildings, “building in” efficiency to design
II. Establish a highly visible energy management system in all targeted public sector buildings
III. Enhance building sector capacity to meet more stringent energy performance standards, both on the design side and in construction technology
IV. Demonstrate the concept of integrated building design with energy-efficiency qualities
V. Integrate project results into standard practice in the public sector and share results with the residential and commercial sectors

**Activities and results:**
- 9 core building codes and standards have been revised and adopted by the Government of Uzbekistan
- 132 national experts, representing 9 national agencies and design organizations (central and regional) have been trained in applying newly adopted energy-efficient building codes
- New educational standards and academic modules have been developed for education programmes on energy efficiency, with both Tashkent State Technical University and Tashkent Architecture and Construction Institute.
- 2 schools for new construction, 2 health clinics and 4 schools have been selected to carry out retrofitting works in five regions of Uzbekistan, to demonstrate new technical solutions contributing to energy efficiency in public buildings
- 6 pilot sites (4 rural schools, 2 rural clinics) located in 4 provinces (Tashkent, Kashkadarya, Navoi, and Ferghana) and in Karakalpakstan (covering almost all climatic zones) were energy audited from November 2010 to October 2011. It was found that the average actual energy consumption in public buildings is 350 kWh/m² (vs. 50 kWh/m² in EU).


Application of the new building codes will need to be strictly monitored, as will the quality of materials produced or imported and their compliance with standards. Vocational training for workers and specialized staff also will be crucial. Moreover, energy efficiency will need to be considered broadly and integrated with other factors, such as the use of renewable resources for energy. For example, in a country with about 265 sunny days per year, Uzbekistan is an ideal user of solar energy, which would both conserve non-renewable energy sources and increase the country’s independence from external energy sources. Attention also will need to be given to planning rules and regulations, supporting the sustainable use of resources, including land, water, gas and fuel.

F. Strategies for coping with natural disasters

Central Asia, including Uzbekistan, is exposed to various natural hazards, such as earthquakes, landslides, floods, avalanches and droughts. According to the Humanitarian Aid Office of the European Commission, in the last 10 years, disasters have taken 2,500 lives and affected about 5.5 million people – almost 10 per cent of the total population – in Central Asia.37

Uzbekistan is prone to earthquakes larger than 8.0 on the Richter scale. It also is prone to severe weather events affecting agriculture, such as seasonal floods and droughts. Other threats, including landslides, avalanches and locust invasions, likewise affect lives and livelihoods.38

During the period 2010-2014, the UNDP-funded project Strengthening Disaster Risk Management Capacities in Uzbekistan helped to create sustainable mechanisms for Disaster Risk Reduction, including an innovative platform for sharing information on Disaster Risk Management. This supported not only the Government but also other stakeholders, such as the Academy of Science, the Red Crescent Society and the general population, through the Makhalla Foundation. Moreover, the Institute of Seismology developed a seismic zoning map, with initial seismicity assessments for the city of Tashkent and neighbouring areas.

Figure XIV
Map of seismic zones of Uzbekistan

Source: Ministry of Emergency Situations of the Republic of Uzbekistan.

To prevent natural disasters and reduce their impact, Goskomarkhitektstroy approved mandatory town planning and building regulations for all design documentation. These include structures’ fire safety; construction in seismic regions; and engineering protection of both territories and buildings from geo-hazards.

However, some of these regulations are more than 15 years old now and need to be updated with new technologies and standards. Furthermore, no information is available on the effectiveness of their implementation or the challenges local governments face in monitoring them. Given the high risk of earthquakes, landslides and avalanches, the Government will need to further prioritize early-warning systems and preparedness for natural disasters; to develop updated building regulations and planning rules; and to support organizations responsible for overseeing implementation.

In turn, efforts such as developing these natural disaster risk maps will help institutions responsible for planning settlements to avoid risky areas, and to improve the security of existing buildings.
CHAPTER IV
Rural Housing Construction

A. Rural housing conditions

A high proportion of the rural population urgently requires improved housing conditions. Although the rural population proportion appears to be decreasing somewhat, this is in part because of the territorial-administrative reforms noted above; rural dwellers still comprise a very significant proportion of the people. By 1 January 2014, 14,937.6 thousand people lived in rural areas (49 per cent of the population).\(^39\)

Household sample surveys\(^40\) show a total of 2,715.7 thousand households in rural areas. Traditionally, the number of children in a rural family is higher than in urban areas, and a detached house may accommodate several family generations. Thus, while the average size of a household in Tashkent is 3.8 people, in rural areas it is 4.9 to 6.0 people. Furthermore, the supply of housing in rural areas is lower than in cities, at 14.5 m\(^2\) per person compared to 15.4 m\(^2\). However, the number of commissioned houses in rural areas remains higher (see Table 4). In all, the growing desire of young families to improve their living conditions and live separately from their parents is fuelling the higher demand for new housing in rural areas; therefore, about 1.5 million families in rural areas are seeking better housing conditions.

Table 4
Dynamics of commissioning housing stock in Uzbekistan, 2009-2013
(Thousands of square metres)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing construction, total</td>
<td>8006.1</td>
<td>6071.6</td>
<td>7674.1</td>
<td>8859.2</td>
<td>9203.3</td>
<td>10367.2</td>
<td>10744.4</td>
</tr>
<tr>
<td>In urban areas</td>
<td>1032.0</td>
<td>720.3</td>
<td>2569.7</td>
<td>2163.4</td>
<td>2259.0</td>
<td>2623.1</td>
<td>2692.6</td>
</tr>
<tr>
<td>In rural areas</td>
<td>6974.1</td>
<td>5351.3</td>
<td>5104.4</td>
<td>6695.8</td>
<td>6944.3</td>
<td>7744.1</td>
<td>8051.80</td>
</tr>
<tr>
<td>including model detached housing</td>
<td>-</td>
<td>-</td>
<td>101.0</td>
<td>884.5</td>
<td>958.4</td>
<td>1301.7</td>
<td>1323.9</td>
</tr>
</tbody>
</table>

Source: State Committee on Statistics.

As already highlighted, the population of Uzbekistan traditionally and strongly prefers ownership as a form of tenure. According to the household sample survey, 99.6 per cent of households in rural areas own their own home, and 98.4 per cent own their land plots. Families with housing improvement thus generally want a detached house with a household plot to farm.\(^41\)

\(^39\) State Committee on Statistics.
\(^40\) Ibid.
\(^41\) Sh.Isakulov, “Characteristics and trends in housing construction in Uzbekistan”, presentation at the workshop for the preparation of the Country Profile on Housing and Land Management, Tashkent, 16 June 2014.
Many houses in rural Uzbekistan were self-built, without involving specialist organizations or design projects, and using traditional walling materials. The quality of rural housing stock therefore often fails to meet modern construction standards or seismic stability requirements. Moreover, the comfort level of rural housing is significantly lower than urban housing, by all comfort factors except gasification (see Table 5).

Access to social services and modern communication likewise is significantly lower in rural areas, and serves as a significant cause of youth migration to cities. Equalization of urban and rural living conditions by constructing new rural residential estates, providing modern utilities and ensuring good social infrastructure thus is an increasingly vital State responsibility.

Table 5
Comparative indicators of improvement of urban and rural housing stock, end of year
(Percentage)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water supply</td>
<td>82.7</td>
<td>83.5</td>
<td>79.5</td>
<td>81.2</td>
<td>81.7</td>
<td>81.8</td>
<td>82.8</td>
</tr>
<tr>
<td>Sewerage</td>
<td>56.0</td>
<td>56.7</td>
<td>49.2</td>
<td>50.1</td>
<td>52.7</td>
<td>52.7</td>
<td>53.9</td>
</tr>
<tr>
<td>Heating</td>
<td>62.7</td>
<td>61.4</td>
<td>57.8</td>
<td>58.6</td>
<td>59.0</td>
<td>59.2</td>
<td>59.0</td>
</tr>
<tr>
<td>Hot water</td>
<td>48.0</td>
<td>48.3</td>
<td>40.9</td>
<td>42.3</td>
<td>43.4</td>
<td>43.2</td>
<td>45.4</td>
</tr>
<tr>
<td>Baths</td>
<td>51.4</td>
<td>50.0</td>
<td>41.7</td>
<td>42.6</td>
<td>43.4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Natural gas</td>
<td>91.5</td>
<td>90.3</td>
<td>86.4</td>
<td>87.0</td>
<td>86.7</td>
<td>86.9</td>
<td>87.5</td>
</tr>
<tr>
<td>Proportion of urban housing equipped with:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water supply</td>
<td>41.5</td>
<td>45.3</td>
<td>44.8</td>
<td>47.8</td>
<td>49.0</td>
<td>49.2</td>
<td>50.3</td>
</tr>
<tr>
<td>Sewerage</td>
<td>8.3</td>
<td>9.0</td>
<td>7.0</td>
<td>9.4</td>
<td>8.4</td>
<td>8.3</td>
<td>8.9</td>
</tr>
<tr>
<td>Heating</td>
<td>21.5</td>
<td>21.4</td>
<td>23.8</td>
<td>25.5</td>
<td>24.7</td>
<td>24.8</td>
<td>25.8</td>
</tr>
<tr>
<td>Hot water</td>
<td>1.9</td>
<td>3.3</td>
<td>2.5</td>
<td>2.8</td>
<td>3.3</td>
<td>3.2</td>
<td>5.5</td>
</tr>
<tr>
<td>Baths</td>
<td>2.0</td>
<td>2.7</td>
<td>3.0</td>
<td>4.1</td>
<td>3.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Natural gas</td>
<td>69.3</td>
<td>72.0</td>
<td>70.9</td>
<td>71.7</td>
<td>71.5</td>
<td>71.7</td>
<td>72.1</td>
</tr>
</tbody>
</table>

Source: State Committee on Statistics.

Rural income level remains lower than urban, partly because of the reduction in the significance of agricultural production, which traditionally provides most rural employment. According to UNDP, about 14.1 per cent of the population lives below the poverty line, with 57.4 per cent of this figure in rural areas. Therefore, households needing separate housing, especially young families, generally cannot build or purchase it without State support. To improve income levels, large-scale construction of rural housing – as well as the development of related utilities such as roads, gas pipelines and

electricity networks, along with social infrastructure – is being considered as a possible solution by the State.

When 2009 was declared the “Year of Rural Development,” the corresponding State Programme on Construction of Model Detached Housing in Rural Areas was developed following a Presidential Decree. The programme’s goals were to improve the quality of rural life, stimulate equality between urban/rural living conditions, ensure integrated development, and create modern social and industrial infrastructures in rural areas. Initially intended for 2009-2013, the programme eventually was extended until 2016. The State Programme of rural housing development includes:

- Priority housing construction in rural areas
- Integrated development of new rural residential estates, ensuring the provision of utilities and social infrastructure
- Construction of detached houses based on standard designs, taking into account social and demographic characteristics and climate conditions
- Establishment of newly built houses as private property, with the right to inheritable possession of household plots
- Measures to ensure sustainable development of rural housing and affordability of new rural housing

B. Construction of model houses in rural areas

Standard designs for detached housing

In 2009, 22 projects for rural residential buildings were developed. They include one- and two-storey houses with one or more apartments, comprising three to six rooms for four- to six-person families. These houses were intended to have conventional or enhanced comfort for different climate zones, and were designed for regions with seismic activity in the range of 7 to 8 on the Richter scale. The house floor area varied from 16 to 30 m² per resident, excluding areas used only in summer. Overall, the project planned to provide houses with electrical energy, gas, hot and cold water, heating, telephone and Internet access. Structures constructed on 0.06- hectare land plots include car canopies, gas-fired boilers, outside toilets and brick walls around the plot. The design includes a pantry, space for small livestock and poultry, in-site water supply, sewerage connection, and electricity.

Based on the standard design, 840 pilot houses were built in 2009. In subsequent years, models of one-storey detached three-, four- and five-room homes with enhanced comfort also were developed. Wall height was increased to 3.2m, while living area rose to at least 72.6 m² for a three-room house, 78.8 m² for a four-room house and 108.4 m² for a five-room house (see Figure XV and Annex IV).

To provide residential estates with social infrastructure, 16 standard models were developed for facilities such as schools, kindergartens, rural medical centres, shopping malls, markets, tea houses, saunas, complex consumer services, bakeries, mini-banks, children's playgrounds and office buildings for public utilities companies.

43 Decree of the President of the Republic of Uzbekistan No. PP-1046 of 26 January 2009 on the State Programme “The Year of Rural Development”.

43
Photo II
A model house


Photo III
A new residential area in the countryside

Figure XV
A model design of a four-room house

Source: Design and research institute Qishloq Qurilish Loyiha Ltd.

Results of implementing the model housing construction programme in rural areas

As a result of the State Programme for rural housing during 2009-2013, more than 33.5 thousand houses were built, which created 1,248 new residential estates; 1,677 km of water supply networks; 1,039 km of electric networks; and 1,346 km of gas networks (see Table 6). Taking into account the need for services and social infrastructure, rural residential estates also were supplied with 10 schools, 26 rural health units, 242 makhalla (local community) centres, 319 shopping centres, 22 market, 94 bakeries, 179 consumer service centres, 51 mini-banks and 113 children's sports facilities during that time period.

New residential estates have been built in rural areas across all regions of Uzbekistan (see Figure XVI and Figure XVII).

Further the construction of housing in rural areas provided a stable growth of housing commissioning in rural areas in 2009-2013 (see Figure XVIII).
Table 6
Results of implementation of the State Programme on Construction of Model Detached Housing in Rural Areas, 2009-2013

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of residential estates</td>
<td>42</td>
<td>225</td>
<td>357</td>
<td>272</td>
<td>353</td>
</tr>
<tr>
<td>Number of houses</td>
<td>847</td>
<td>6,800</td>
<td>7,400</td>
<td>8,510</td>
<td>10,000</td>
</tr>
<tr>
<td>Cost of construction, billion UZS</td>
<td>50.7</td>
<td>28.9</td>
<td>576.5</td>
<td>906.0</td>
<td>1385.4</td>
</tr>
<tr>
<td>Number of social infrastructure facilities</td>
<td>-</td>
<td>132</td>
<td>306</td>
<td>228</td>
<td>147</td>
</tr>
<tr>
<td>Length of the constructed water supply networks, km</td>
<td>65.9</td>
<td>306.5</td>
<td>475.7</td>
<td>410.0</td>
<td>418.9</td>
</tr>
<tr>
<td>Length of the gas supply networks, km</td>
<td>49.33</td>
<td>261.31</td>
<td>322.20</td>
<td>327.90</td>
<td>385.6</td>
</tr>
<tr>
<td>Power supply networks completed, km</td>
<td>43.68</td>
<td>248.18</td>
<td>227.50</td>
<td>246.10</td>
<td>273.1</td>
</tr>
<tr>
<td>Transformer substations installed</td>
<td>38</td>
<td>136</td>
<td>180</td>
<td>180</td>
<td>249</td>
</tr>
</tbody>
</table>

Source: Ministry of Economy.

Figure XVI
Number of new residential areas in the viloyats of Uzbekistan built in 2009-2013 under the State Programme on Construction of Model Detached Housing in Rural Areas

Source: Ministry of Economy.
Figure XVII
Number of detached houses in the viloyats of Uzbekistan built in 2009-2013 and in 2014 (estimate) under the State Programme on Construction of Model Detached Housing in Rural Areas

![Bar chart showing number of detached houses](image)

Source: Ministry of Economy.

Figure XVIII
Dynamics of housing stock commissioning in rural areas, 2009-2013
(Thousands of square metres)

![Bar chart showing housing stock](image)

Source: State Committee on Statistics.
C. Institutional framework for construction of model housing in rural areas

The following institutions were established by Presidential Decree in order to implement the State Programme on Construction of Model Detached Housing in Rural Areas:

- The Main Design and Research Institute Qishloq Qurilish Loyiha Ltd.
- The Engineering Company Qishloq Qurilish Invest
- The Joint Stock Commercial Bank Qishloq Qurilish Bank

Main design and research institute “Qishloq Qurilish Loyiha Ltd.”

The main design and research institute Qishloq Qurilish Loyiha Ltd. is the primary organization implementing policy in rural construction. Its mission is to ensure radical improvements in housing design and construction, as well as to provide industrial and social infrastructure in rural areas.

Qishloq Qurilish Loyiha Ltd. provides:

- Development of standard architectural designs for construction of rural settlements and territories
- Development of new standards for housing, socio-cultural and sanitary facilities in rural areas, using modern building materials and technologies and taking into account climatic conditions and terrain as well as the socio-demographic characteristics of different regions
- Development of design documentation for new construction, major renovation and modernization
- Development of regulation documents for design and construction
- Examination of architectural design projects of rural citizen assemblies, or general plans of rural settlements
- Development of investment projects
- Development of feasibility studies, preliminary technical and economic estimates, and cost-benefit analyses for rural development and construction of facilities

Qishloq Qurilish Loyiha Ltd. has developed a wide range of house models and currently focuses on single-storey projects of three-, four- and five-room apartment buildings, funded with mortgage loans.

Engineering company “Qishloq Qurilish Invest”

The engineering company Qishloq Qurilish Invest acts as a single developer for housing construction based on approved model designs and organizes the full range of construction work. It has 13 regional branches.44

The main objectives of Qishloq Qurilish Invest are to:

- Conduct marketing studies of the housing market, especially with regard to assessment of the demand for detached houses
- Act as a developer for residential estates on the basis of agreements with citizens who will be future owners of detached houses
- Place orders for housing construction on a competitive basis

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44 Resolution of the Cabinet of Ministers of 26 October 2009 on measures to organize the construction of housing in rural areas on the basis of standard projects involving engineering company Qishloq Qurilish Invest.
• Transfer completed houses to citizens

To finance residential housing, Qishloq Qurilish Invest uses the funds of future house owners, either savings or subsidized mortgages. To start construction of a residential building, an application is submitted to the local branch of Qishloq Qurilish Invest. This must specify the land plot, a house model and a payment method for construction. If the local branch approves the application, it informs the applicant and invites him or her to sign a contract for house construction. Should the applicant plan to use the contract to obtain a mortgage, a preliminary contract is created. After the bank grants the mortgage, it informs the engineering company local branch about the borrower's initial payment for construction. Based on this information the branch of Qishloq Qurilish Invest signs the main contract with the successful applicant. Qishloq Qurilish Invest then tenders for a contractor, making the selection according to Government-sanctioned procedures.  

Upon completion, Qishloq Qurilish Invest pays 95 per cent of the contractor's fee. The remaining 5 per cent is paid 12 months after the certificate commissioning date, assuming there are no complaints about construction quality from the homeowner. Qishloq Qurilish Invest also applies to the committee created by the district khokim (governor) to request residential house use. If this is successful, the engineering company or homeowners apply to Goskomzemkadastr to obtain State registration of their property rights. In addition, Qishloq Qurilish Invest applies to the authorized body of the khokimiyat for registration of the land with inheritable possession. This decision is taken by a district (city) khokim without holding an auction.

Joint stock commercial bank “Qishloq Qurilish Bank”

The Joint Stock Commercial Bank Qishloq Qurilish Bank provides funding for model housing construction in rural areas by providing subsidized loans to low-income households, using Government-approved procedures.  

A mortgage loan borrower must meet the following requirements:

• Be a citizen of the Republic of Uzbekistan, live in a rural area, and be at least 18 years old on the day of application
• Have had a permanent job in the past 12 months, or a steady income from personal subsidiary, own farm, or self-employment, or any other legal source of income sufficient to service the mortgage
• Be able to pay a deposit of least 25 per cent of the estimated house cost and/or the volume of completed construction work and/or building materials
• Have no loan arrears to credit institutions
• Confirm their intent to reside in, and not sell or transfer, the house for at least five years from receipt of ownership

Borrowers should have their own funds for the initial mortgage loan payment. However, the deposit, in part or in full, can be paid by the borrower's employer to a savings deposit account in the borrower’s name.

45 Resolution of the Cabinet of Ministers No. 37 of 13 February 2012.
47 The condition for obtaining of a soft loan from the funds of the credit line of ADB.
The amount of the mortgage loan is determined by the solvency of the borrower or co-borrowers, and may not exceed 1,000 times the legal minimum wage or 75 per cent of the estimated house cost. For participants in the State Programme, mortgages are available for up to 15 years, with a three-year grace period.

Other participants

The Council of Ministers of the Republic of Karakalpakstan and the provincial authorities established permanent territorial commissions to select participants for the State Programme to construct rural model housing, in accordance with a Presidential Decree\(^48\). Information about programme participation is provided by the regional units of the Ministry of Economy, the Ministry of Labour and Social Protection, the Makhalla Foundation, and the Women's Committee.

Land plots for construction of new residential estates are allocated based on annual assessment. The allocation must be agreed by Goskomzemgeodezkadastr and Goskomarkhitektstroy. Land plots are then transferred to Qishloq Qurilish Invest to organize construction and social facilities.

Allocated land plots may not be agricultural or forest land, or be in close proximity to sown and tilled areas of major crop production. Wherever possible, they should expand existing residential estates and have access to external utility lines. The land plot area should be big enough for at least 10 detached houses with the appropriate service infrastructure.

D. Measures of State support for the construction of model housing in rural areas

The State Programme on Construction of Model Detached Housing in Rural Areas has support measures that apply to all participants in the process. These measures are of two groups:

1) Those aimed at helping rural people in need, with medium or low incomes, to improve their living conditions.

2) Those aimed at reducing the cost of model housing.

Measures to support people in rural areas

The beneficiaries of the State Programme on rural model housing are the rural population, in particular:

- Households with middle and low income
- Socially vulnerable families (families with children, single mothers)
- Public sector workers (teachers, doctors)
- Young couples buying their first home
- Small businesses and private entrepreneurs who will create new jobs in a rural area

Measures to support middle- and low-income households are primarily designed to assist in obtaining a “soft” construction loan for a long term (15 years), with a three-year grace period and an interest rate well below the market rate (7 per cent per annum for the first year, and then 0.9 times the Central Bank principal rate). This provides much greater access to credit than market conditions can, given that the market rate has sometimes reached 18 per cent per annum.

\(^{48}\) Decree of the President of the Republic of Uzbekistan No. PP-1683 of 11 November 2012.
In addition, individuals who purchase model houses have the following benefits:

- Their taxable income excludes income, including employers’ contributions, spent to repay mortgage loans and their accrued interest
- Free inheritable allocation of land plots (with no auction involved), once the contract between Qishloq Qurilish Invest and the citizen has been concluded
- Tax exemption on the housing property for the entire loan repayment period

Tax incentives also exist for employers of programme participants who provide funds to cover mortgage repayments or help employees with young families to purchase housing. Their taxable corporate income is reduced by the amount given, but can be no more than 10 per cent of total taxable income.

**Measures to reduce the cost of model housing construction**

Between 2007 and 2010, the cost of housing (per m$^2$ of floor area) in Uzbekistan multiplied on average by a factor of 2.34, according to the State Committee on Statistics. However, the Government has acted to prevent significant increases in rural model housing costs, thus making them affordable to low-income households.

To reduce the cost of services and works, all organizations involved in the creation of rural residential estates under the Government programme were granted tax and customs privileges until 1 January 2015. Additionally, to reduce the cost of contract works Qishloq Qurilish Invest purchases some materials (including cement and rolled steel) directly from manufacturers at discounted prices, and transfers these to contractors.

**E. Mechanisms to stimulate investment for the construction of model housing and infrastructure in rural areas**

To ensure integrated development of new rural housing estates, the State Programme stimulates investment in housing construction, social infrastructure and engineering infrastructure facilities. As noted above, housing construction investment sources consist of participants’ personal savings (constituting at least 25 per cent of costs), plus mortgage loans. These loans are financed by earmarked funds from the State budget, funds from participating commercial banks, and loans from international financial institutions.

In 2009-2011 Qishloq Qurilish Bank issued preferential mortgage loans, using the bank’s funds and trust funds from the Ministry of Finance, for rural model housing construction across the country. Since 2012, ADB has loaned money to the Republic of Uzbekistan to help finance these projects, establishing a USD 500 million multi-tranche financing mechanism. These funds are provided as a credit line to issue preferential loans to participants in the State Programme. Further, since 2013 the programme on mortgage lending for construction of rural model housing has been joined by the Joint Stock Commercial Bank, Ipoteka Bank and the National Bank for Foreign Economic Activities.

Construction of housing and transport infrastructure and social facilities for new rural residential estates has been entrusted to relevant Ministries and agencies by a 2010 Presidential Decree. Among

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facilities, water supply systems and educational institutions are financed by the national budget; power supply facilities are financed by the joint stock company Uzbekenergo; gas supply networks are financed by the joint stock company Uztransgaz; and the construction of roads is funded by the National Road Fund.

F. Role of rural housing construction in accelerating development of the construction industry

Construction of model housing in rural areas uses building materials and components produced by domestic enterprises. Thus, baked bricks with better characteristics and longevity completely replaced lower-quality airbricks, which are traditional for rural housing in Uzbekistan. In model housing construction, the only imported materials are sheet metal roofing, lumber and chipboard.

Although the share of model housing in rural areas is relatively small (13.2 per cent of rural housing construction volume in 2010, and 16.4 per cent in 2013), the new residential estates have created a higher standard for housing planning solutions, materials and components. This is confirmed by the fact that over the last decade, the use of airbricks fell by more than half. In addition, the estates set new standards for landscaping of surrounding areas and significantly affect rural housing construction with custom-tailored projects, including the renovation of existing buildings or demolition and construction of new houses.

In addition, as noted above, the increase in rural housing construction has been accompanied by the creation of new jobs. Since the start of the State Programme, nearly 900 new contractors, mainly small businesses, were created. In 2013 alone, model housing construction created more than 44,600 jobs. Housing development also helps optimize the structure of employment in rural areas by increasing the share in non-agricultural sectors.

G. Risks and drawbacks of the construction of model housing in rural areas

Participants in the State Programme on Construction of Model Detached Housing in Rural Areas can obtain a mortgage at an extremely favourable rate, as already highlighted. Yet the ability to provide such mortgages depends primarily on credit from international financial institutions; should that support decrease, this could jeopardize the 2016 extended State Programme.

Risks also exist to increasing rural housing construction while restricting participation to households with average-to-below incomes. Bank creditworthiness requirements for a mortgagee remain quite high, taking into account the current average income level. In 2013 the borrower’s monthly income (with possible co-borrower) had to be more than UZS 935,700 for non-fixed monthly payments and more than UZS 735,700 when annuity payments apply (interest and principal fixed payments are UZS 588,600 per month). However, according to the Ministry of Economy, in 2013 the average per-capita income in the country was UZS 3,163,800 (UZS 263,600 per month). In other words, the preferential mortgage loan for model housing is not affordable to every rural middle-income

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50 The highest values of per-capita income among urban dwellers is found in Tashkent, at UZS 6,449.1 thousand per year, and in the Navoi region, at UZS 5,043.6 thousand per year (UZS 537.4 thousand and UZS 420.3 thousand per month, respectively). For other regions, per-capita income in the range of UZS 2,212.6 to 3,846.2 thousand per year are usual (UZS 184.4-320.5 thousand per month).
household. To obtain a loan, the borrower often needs to have a co-borrower – and both need at least average regular income. A young family often cannot do this without parental assistance, for example.

With planned increases in the volume of housing construction, a deficit of programme participants meeting the required conditions for income and creditworthiness likely will increasingly become an issue, despite the current high demand for new housing in the countryside. At the same time, reducing the cost of detached houses to make them more affordable will lead to fewer house models being selected by Qishloq Qurilish Invest for construction, as well as to standardization of housing spatial planning solutions.

Generally, low-income households also cannot afford the owner's burden of maintenance and timely repair of the owned housing. Concentration of low- and middle-income households in new residential estates further reduces the possibility of traditional neighbourly assistance, which is available in makhallas with mixed-income households. The housing needs of low-income families, particularly vulnerable groups not meeting conditions for preferential mortgage loans, currently have no solution except for the strong rural tradition of housing construction assistance provided by makhallas.

Overall, ownership-based tenure, supported by the State Programme, maintains the population in rural areas – but it also reduces labour mobility. The near-absence of rented social housing particularly limits the mobility of skilled workers to shift from the city to the countryside to work on fixed-term contracts.

It also should be noted that, despite the extremely varied landscape of Uzbekistan, the rural housing program tends to use the same models across the country, regardless of differences in landscapes and in local or historical architecture traditions. A typical housing estate layout consists of a repetitive series of houses of the same type (individual houses with a land plot), painted in standard colours everywhere, regardless of differences in landscape. For example, despite the project’s stated intention of reflecting local conditions, most model houses have metal roofs, which is not particularly suitable for the climate of Uzbekistan (quite cold winters, very hot summers).
While analyzing urban development and planning in Uzbekistan, two elements should be taken into account: its history, and its varied landscape and climate. These elements account for the contemporary geography, morphology and societal composition of Uzbekistan’s cities.

The country has a very diverse landscape and a rich and ancient culture: the Great Silk Road crossed Uzbekistan, and its cities were important international centres of commerce and cultural exchange, with mutual enrichment of culture and language. Some of the major cities in Uzbekistan are more than 2,500 years old, including Tashkent, Samarkand, Bukhara, Shahrisabz, Khiva and Termez.

Historical and natural conditions in different regions of the country have led to the development of different kinds of settlements. These can be described as follows:

- Old developed areas, with intensive urban development and high-density settlements, widely ranging in size (for example, Tashkent, Samarkand, Bukhara region, the Ferghana Valley), but with a relatively uniform distribution
- Ancient irrigation areas such as Khorezm and Karakalpakstan, with a network of small rural settlements concentrated in favourable climatic zones and serving as communication nodes
- Newly irrigated land of the central part of the Ferghana Valley, Karshi, Jizzakh and Mirzachul steppe, with sporadic rural and urban settlements
- Mountain areas with small rural settlements in river valleys
- Desert areas with small rural settlements and pastures

As of 1 January 2014, Uzbekistan had 119 cities. Most towns are in regions with more favourable environmental conditions (see Annex 5).

Having been a part of the former Soviet Union, the Republic of Uzbekistan inherited a complex hierarchical planning system, and urban planning remains highly centralized. Goskomarkhitektstroy manages the development of major cities by planning and approving administrative and residential buildings, engineering infrastructure and communications. This is done in accordance with the Town Planning Code, which is also used by khokimiyats of cities and viloyats to standardize planning documentation at various levels.

Planning documentation has a pyramidal hierarchy, from the Master Scheme of Settlement, to schemes of territorial planning, down to the master plan of an individual settlement. This addresses long-term development based on economic growth, demography, geography, climate and social requirements. Categories include residential, public and business, manufacturing, engineering, transport, recreation, special-purpose and suburban areas.

Where applicable, planning documentation also includes:

- Planning documents for development of the territory and parts of the territory of the Republic of Uzbekistan
- Planning arrangements of the districts of the Republic of Karakalpakstan and viloyats
- Planning arrangement projects for districts or groups of districts

51 Goskomarkhitektstroy.
52 The Committee was established in 1928 and has delivered plans for almost all the cities of Uzbekistan.
53 Urban Development Code of the Republic of Uzbekistan, Chapter V, Article 29-39. Building Regulations No. SHNK 1.03.02-04 "Instruction on the composition, development, coordination and approval of urban planning documentation on development planning and development of territories".
• General layouts of settlements
• Projects of urban and township boundaries
• Development schemes for settlements or parts of settlements
• Project documentation for the construction of buildings and other facilities

The Master Scheme of Resettlement and the development plans for parts of Uzbekistan’s territory are 50-year plans, with a particular focus on the next 10 to 25 years. Other urban planning documents cover 25 years, with a focus on the first phase of construction. All planning documents are subject to revision 10 years after their adoption.

The master plan of an urban settlement takes into account the main provisions of the previous master plan and accomplishes the following tasks:

• Determining prospective economic development and forecasting population growth
• Defining the main development direction of a settlement
• Developing proposals on the settlement’s functional zoning and architectural design
• Identifying reserved land for further development
• Providing the principles for equipment systems and land development

Urban development in Uzbekistan is based on the concept of compact cities, with the territory divided into planning districts and central or peripheral planning areas. Bigger cities are conceived as polycentric systems.

According to Article 41 of the Town Planning Code, master plans must ensure:

• A favourable living environment
• Protection of areas from the effects of natural and manmade disasters
• Prevention of excessive concentrations of population, industry or pollution
• Protection and use of specially protected territories and objects of cultural heritage

Two procedures exist for urban plan preparation, namely, one for cities with more than 50,000 inhabitants, and another for cities with fewer. Both types of cities have standard elements in their plans:

• Government appointment of a State Committee (cities needing a new urban plan are chosen annually, and in 2014 nine cities were chosen)
• Field visits by State Committee experts to assess the specific needs of the city and its territory
• Prior analysis by sectoral experts
• Preparation of three draft master plan options
• Technical analysis of the three drafts, along with consultation with the mayor, governor and local specialists, for amendment and decision
• Analysis and refinement of the chosen draft by the State Committee, with in-depth examination by a national commission of State Committee experts

At this stage, the procedure diverges. For larger cities, a plan must undertake a long session of approvals by all relevant Ministries and State Committees, while for smaller cities; only a direct approval by the State Committee of Architecture is needed.

For the largest cities, with a population of more than 250,000, the plan is divided into two stages:

1. Technical and economic study (feasibility study) of the master plan of the city and its suburban areas
2. Draft of the master plan for the city
All remaining settlements, including resorts and recreational areas, have a master plan developed in a single step, with the feasibility study comprising a section of this.

In 2005 cities needing new master plans for 2005-2010 were approved by Presidential Decree.\textsuperscript{54} In 2010, meanwhile, the Cabinet of Ministers\textsuperscript{55} approved the cities needing master plans from 2011-2014, to be covered by the State budget. An investment programme is approved annually, which includes funding for master plan development.

Currently, master plans for rural settlements are being developed across the country. A total of 1,080 master plans are needed, according to the design and research institute Qishloq Qurilish Loyiha Ltd., and 70 per cent of the work has already been completed. Once created, these plans are sent to district khokimiyats and architects, and are used to develop rural settlements.

Drafting master plans involves industry experts at national and local levels, as well as requires coordination with Ministries, city and viloyat administrations. A master plan draft is not published or publicly discussed, and the public is not involved at any stage. Only once the plan is approved, a makhalla organizes public conferences to explain the plan’s impact on local neighbourhoods. Thus, makhallas have great potential for public involvement, given that their decentralized structure could be used to improve public participation in urban and environmental planning.

**Urban development of the city of Tashkent**

Tashkent is the capital of Uzbekistan, with a population of more than 2.4 million people.\textsuperscript{56} This makes it, not just the largest city in the country, but the largest in Central Asia.

During the Second World War, Tashkent saw a sharp increase in economic development. Most evacuees from western and central regions of the Soviet Union came to the city, as did large industrial enterprises and educational institutions. Tashkent consequently became one of the largest centres of Soviet heavy industry, especially the aviation and engineering industries, and for several decades the city's population grew rapidly. After the collapse of the Soviet Union in the early 1990s, Tashkent developed more metropolitan functions, leading to intense population growth and development of residential areas.

In 1989, a feasibility study of the Master Plan of Tashkent until 2010 was approved, which projected population growth of up to 3 million and a corresponding significant expansion of the city. The plan envisaged the demolition and rebuilding of more than 3 million m\textsuperscript{2} of dilapidated housing, as well as expansion of some areas.

Currently, the city of Tashkent has a relatively compact shape: 25 kilometres north-south, and about 22.5 kilometres east-west. On 1 January 2014, the territory of Tashkent was 33,378 hectares,\textsuperscript{57} divided into 11 administrative regions (see Figure XIX).

\textsuperscript{54} Resolution of the President of the Republic of Uzbekistan No. 165 PP of 30 August 2005 on Measures to Improve the Design and Implementation of Master Plans of Cities, Townships and Rural Settlements.

\textsuperscript{55} Resolution of the Cabinet of Ministers of the Republic of Uzbekistan of 4 December 2010 on Measures to Improve the Design and Implementation of Master Plans for Cities and Urban-type Settlements and Drafts for the Architectural Planning of Rural Citizens’ Assemblies.

\textsuperscript{56} State Committee on Statistics.

\textsuperscript{57} Goskomzemgeodezkiadastr.
During the period of 1990-2010, new territories were also added to Tashkent (see Figure XX).

Later, the amended Master Plan of Tashkent and its suburbs through 2015 was adopted and was finalized in 1997. In 2011 the research and master plan design institute SUE “ToshkentboshplanLITI”
completed a feasibility study of the Master Plan of Tashkent and its suburbs, which, in line with the planning procedure described above, offered three options for urban development.

The plan’s main characteristic was to use internal territorial resources, a notable change from extending the borders of the city in favour of internal restructuring and regeneration. It envisioned more orderly growth, taking into account planned long-term development parameters, creation of reserve land for flexible planning, and sustainable city development. Managing industrial development to restructure the economy, plus modernization, reconstruction and establishment of integrated scientific and industrial areas, was intended to make it possible to reduce non-residential territories and residential areas.

A particular focus of the project has been the functional and spatial development of the city centre.

Figure XXI
**Master Plan of Tashkent through 2030**

Tashkent is distinctive for its broad streets, with wide green separation zones – sweeping lawns separated from the road with walkways. There are 911,100 kilometres of these green strips, in streets, roads and driveways. The total area of green corridors and plantations within city limits is 9,579.2 thousand hectares, or 28.6 per cent of the total area. In addition, there are about 5.5 m² of parks and gardens per inhabitant in Tashkent, which, with the street greenery and the greenery of the individual housing, adds up to 50 m² per inhabitant.

By proportion of industrial area, Tashkent is definitely a post-industrial city; the city administration intends to reduce this further, redeveloping former industrial “brownfields.” Office land share stands at only 2 per cent, although this figure may be a result of categorization (i.e., small businesses may be located within residential buildings). Motor road area appears significant, at 21 per cent, but is similar to the proportion found in other international cities (see Table 7).

On 1 January 2014, the housing stock in Tashkent stood at 45.7 million m². This has resulted in an average housing supply is 19.5 m² per inhabitant.
Table 7  
**Land use in Tashkent, by function**

<table>
<thead>
<tr>
<th>Land use category</th>
<th>Area, hectares</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>16,479</td>
<td>50</td>
</tr>
<tr>
<td>Other</td>
<td>7,004</td>
<td>12</td>
</tr>
<tr>
<td>Motor road</td>
<td>3,867</td>
<td>21</td>
</tr>
<tr>
<td>Industry</td>
<td>2,869</td>
<td>9</td>
</tr>
<tr>
<td>Designated green areas</td>
<td>1,145</td>
<td>3</td>
</tr>
<tr>
<td>Rail and other transport</td>
<td>989</td>
<td>3</td>
</tr>
<tr>
<td>Office</td>
<td>715</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33,068</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source:* Tashkent Master Plan of 2012.

In all, the capital’s residential development covers more than 16,000 hectares. Residential density is generally quite low at 2,689 m²/hectare, because 67 per cent of the developed area is occupied largely by individual single-storey houses, home to 45 per cent of the population. The density of individual housing is 1,703 m²/hectare. Indicators of housing density for multi-storey buildings are quite high at 4,772 m²/hectare, which corresponds to an average of four storeys per building.

Table 8  
**Dynamics of selected Master Plan indicators in Tashkent**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>As measured in 1985</th>
<th>As measured at the end of 2013</th>
<th>Percentage of change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>2,083,000.0</td>
<td>2,352,896.0</td>
<td>13.0</td>
</tr>
<tr>
<td>Area, thousand hectares</td>
<td>27.6</td>
<td>33.4</td>
<td>21.0</td>
</tr>
<tr>
<td>Housing floor area, thousand m²</td>
<td>27,536.0</td>
<td>43,645.0</td>
<td>58.6</td>
</tr>
<tr>
<td>Housing floor area, thousand m², in 1-2-storey houses</td>
<td>9,302.0</td>
<td>17,138.0</td>
<td>84.2</td>
</tr>
<tr>
<td>Housing floor area, thousand m², in 4-7-storey houses</td>
<td>14,973.0</td>
<td>21,986.0</td>
<td>47.0</td>
</tr>
<tr>
<td>Housing floor area, thousand m², in 9-16-storey houses</td>
<td>3,261.0</td>
<td>4,520.0</td>
<td>39.0</td>
</tr>
<tr>
<td>Housing density, m²/hectare</td>
<td>998.0</td>
<td>1,320.0</td>
<td>32.0</td>
</tr>
</tbody>
</table>

*Sources:* Tashkent Master Plans of 1988 and 2013.
Selected Master Plan indicators in Tashkent reveal some interesting trends (see Table 8). In almost 30 years, the population has grown by 10 per cent but the urban area has expanded by 20 per cent, taking into account only legal expansion; actual urban growth may be even greater. This is consistent with global trends for urban area expansion at a rate of several percentage points annually.

The Tashkent Master Plan of 2012 incorporates this as a policy, and some positive trends can be seen: For example, buildings are being built higher, meaning that the density of housing floors (m²/hectare) has increased by 32 per cent. However, the picture for Tashkent is mixed – while high-rise floor area (4-/16-storey houses) has increased by 45 per cent, low-rise floor area (1-/2-storey houses, predominantly individual homes) has increased by almost twice as much, at 84 per cent. Overall, these figures are a positive development for housing provisioning policy, but they also are evidence of urban sprawl and will undermine the “compact city” policy if the trend continues.

Photo IV

Examples of residential buildings in Tashkent


Tashkent housing stock is varied in terms of types of buildings, floors, structural systems and degree of comfort. Residential buildings can be grouped as low-rise, with 1, 2, and 3 floors, or high-rise. The
latter category subdivides into 4- or 5-storey buildings with no elevators, and 6- to 16-storey buildings with elevators. However, apartment buildings with elevators account for only 16.55 per cent of multi-family housing stock area and 10.86 per cent of total housing stock area.

In all, housing stock has been shaped by policy swings. Initially high-rise housing was favoured, motivated by the need to save land, but this changed to providing urban land for low-rise individual buildings.

Low-rise housing is much desired but leads to urban expansion, absorbing valuable agricultural land; in addition, it is more expensive to develop and supply with infrastructure. In spite of this, in coming years the volume of low-rise individual dwellings is expected to increase significantly. This will be due to the inclusion in previous city plans of large areas for rural-type buildings, as well as implementation of previous decisions on allocation of land plots for individual housing development.

Tashkent’s population is projected to grow by 442.6 thousand people between 2012 and 2030, according to the State Institute of Forecasting and Macroeconomic Research. People of working age currently comprise 61.3 per cent of the total, although this is expected to drop to 58 per cent in the future.

Overall, the future development of Tashkent is based on earlier feasibility studies under the 2011 Master Plan, except for development on the left bank of the river Chirchik up to the Tashkent bypass road. The growth area will be 6,109 hectares, and the total city area will reach 39,177 hectares.

Figure XXII
New areas of expansion in Tashkent

Source: Goskomarkhitektstroy.

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For environmental and security reasons, the international airport will be moved outside of the city and placed 8 km to the south. A system of recreational parks also is planned within city limits, along the river Chirchik.

**Urban development of the city of Samarkand**

Samarkand is the second-most populous city in Uzbekistan (after Tashkent), with 509,000 citizens. It is located in the great oasis on the edge of the Kyzyl-Kum desert, in the valley of the river Zarafshan, southeastern Uzbekistan. For an analysis of urban planning, it provides a good example of a type of city with substantial historical background.

As one of the oldest centres of civilization in Central Asia, Samarkand is included in the UNESCO World Heritage List, with the historic town of Samarkand defined by UNESCO as a crossroads and melting pot of the world's cultures.  


The territory of Samarkand is divided into concentric zones of central and peripheral. The central zone is the most “valuable” part of the city, consisting of both the old and new city. Industrial and warehouse facilities are being eliminated from this central zone.

The 1980 plan defines the peripheral zone as the region between the inner ring clearway highway and the projected boundaries of the city. The middle belt of the peripheral zone, adjacent to the central zone, acts as a reserve for the development of the centre as land is freed from old and reconstructed buildings. Building complexes in the city centre, combined with green spaces and pedestrian linkages, create a system of architectural groupings that dominate the urban landscape and remain an organic element of the urban system.

The historical and cultural significance of Samarkand are the main factors determining the prospects for its development. Nonetheless, although the historical centre of Samarkand plays a key role in shaping the architectural appearance of the city, it must coexist with the development of modern system functions, reconstruction of residential buildings, improvement of street networks, and provisioning of the whole area with an engineering infrastructure.

Photo V
Registan Square in Samarkand

Source: C. Batac, July 2014.

Challenges that a historic city such as Samarkand currently faces are related to very high migration to the city, and with that, the need to provide new residential buildings. Furthermore, cultural and historical issues exist in replacing old buildings. At the same time, the city’s population density compared with other cities suggests that Samarkand appears to have ample reserves of inner land for further development; in all, the population density is only 5,351.1 per m².

In 2004 a master plan of Samarkand was developed, aimed at regulating urban sprawl. To decrease the migration pressure on Samarkand, the establishment of satellite-settlement cities was considered, as well as the enlargement of existing ones. This plan foresaw the completion of public buildings in
the administrative centre of the city, as well as the replacement of dilapidated housing with higher-
standard new apartment buildings.

The reconstruction of residential buildings of the “old city” of the Timurid era is focused on
preservation of the buildings' structure while providing new living standards. Meanwhile, in the “new
city,” the main focus is on housing stock renewal, along with provision of facilities and local services.

Because of their central location, both the “old” and the “new” city are involved in the development
and commercialization of tourism-related services. An integrated tourism development programme is
based on a unified system of tourist concentration zones, connected by transport routes. This provides
a full range of tourist services within 15 minutes’ walking distance, including accommodation,
services, entertainment, information services and transport. The master plan further provides for
possible locations of such facilities, taking into account the city’s rich historical and cultural heritage.
A. Condition of public utility services

The Uzbekistan public infrastructure and utilities services system was created during the Soviet period; since independence in 1991, the availability of public utilities has increased. During the period 1990-2012, for example, total water supply to flats (housing) increased from 64 to 82.7 per cent; delivery of natural gas from 44.6 to 83.5 per cent; provision of central heating from 29 to 44.9 per cent; and sewerage network provision from 25 to 77 per cent (see Table 9). However, figures vary between regions, and a significant gap still exists between urban and rural areas (see Table 10).

Meanwhile, during 1995-2012, investments in public services as a whole decreased from 2.1 per cent to 0.5 per cent of GDP.60 Construction and reconstruction of public utilities are funded primarily from the national and local State budgets, through targeted programmes.

Table 9
Provision of flats (housing) with public utility services
(Percentage of total number of flats)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Water supply</td>
<td>64.0</td>
<td>80.4</td>
<td>82.7</td>
<td>82.7</td>
</tr>
<tr>
<td>including the rural area</td>
<td>55.0</td>
<td>72.3</td>
<td>73.3</td>
<td>72.6</td>
</tr>
<tr>
<td>Gas supply (natural gas)</td>
<td>44.6</td>
<td>76.1</td>
<td>83.5</td>
<td>83.5</td>
</tr>
<tr>
<td>including the rural area</td>
<td>19.3</td>
<td>65.9</td>
<td>77.0</td>
<td>77.4</td>
</tr>
<tr>
<td>Heating</td>
<td>29.1</td>
<td>35.4</td>
<td>44.9</td>
<td>44.9</td>
</tr>
<tr>
<td>Sewerage</td>
<td>25.5</td>
<td>28.3</td>
<td>37.8</td>
<td>37.6</td>
</tr>
</tbody>
</table>

Source: State Committee on Statistics.

Despite ongoing reforms in public services, some key issues remain. Over the past 10 years, the heating supply to cities and towns has decreased by 16 per cent, with the number of faulty heating networks increasing by a third. The loss of heat and electricity networks exceeded 60 per cent and 35 per cent respectively, while losses in water supply increased by 40 per cent.61 Deterioration of infrastructure networks represents the primary cause, affecting reliability and continuity.

For new urban construction, no serious obstacles are found when connecting to public services. However, with further such construction the infrastructure capacity may be exceeded, leading to connection delays – and making it impossible to issue a building permit. This increase in construction results from population growth, rapid business development, increased urbanization and the massive creation of new enterprises by industrial modernization programmes. The level of public infrastructure services will not, therefore, fully meet the needs of the country’s development status.

Table 10
Provision of housing stock with utility infrastructure in Uzbekistan, by region, as at 1 January 2013
(Percentage)

<table>
<thead>
<tr>
<th>Locality</th>
<th>Provision of flats (houses) with water supply</th>
<th>Provision of flats (houses) with heating</th>
<th>Provision of flats (houses) with sewerage</th>
<th>Provision of centralized collection of solid waste</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Countryside</td>
<td>Urban</td>
<td>Urban</td>
</tr>
<tr>
<td>Republic of Karakalpakstan</td>
<td>69.2</td>
<td>64.4</td>
<td>37.0</td>
<td>19.7</td>
</tr>
<tr>
<td>Andijan</td>
<td>92.9</td>
<td>88.3</td>
<td>32.2</td>
<td>41.8</td>
</tr>
<tr>
<td>Bukhara</td>
<td>61.4</td>
<td>49.6</td>
<td>56.1</td>
<td>66.8</td>
</tr>
<tr>
<td>Djizzakh</td>
<td>72.3</td>
<td>72.0</td>
<td>30.5</td>
<td>29.9</td>
</tr>
<tr>
<td>Kashkadarya</td>
<td>84.3</td>
<td>77.1</td>
<td>36.0</td>
<td>39.3</td>
</tr>
<tr>
<td>Navoi</td>
<td>78.1</td>
<td>68.0</td>
<td>55.5</td>
<td>61.7</td>
</tr>
<tr>
<td>Namangan</td>
<td>77.7</td>
<td>68.9</td>
<td>59.3</td>
<td>65.0</td>
</tr>
<tr>
<td>Samarkand</td>
<td>85.3</td>
<td>80.0</td>
<td>49.7</td>
<td>45.1</td>
</tr>
<tr>
<td>Surkhandarya</td>
<td>79.4</td>
<td>76.1</td>
<td>39.1</td>
<td>34.1</td>
</tr>
<tr>
<td>Syrdarya</td>
<td>79.0</td>
<td>78.9</td>
<td>91.9</td>
<td>69.5</td>
</tr>
<tr>
<td>Tashkent</td>
<td>81.9</td>
<td>71.2</td>
<td>73.0</td>
<td>58.8</td>
</tr>
<tr>
<td>Fergana</td>
<td>89.4</td>
<td>80.5</td>
<td>43.5</td>
<td>41.8</td>
</tr>
<tr>
<td>Khorezm</td>
<td>63.4</td>
<td>52.2</td>
<td>97.3</td>
<td>31.1</td>
</tr>
<tr>
<td>Tashkent city</td>
<td>99.3</td>
<td>-</td>
<td>99.1</td>
<td>99.3</td>
</tr>
<tr>
<td>Total for the country</td>
<td>82.7</td>
<td>72.6</td>
<td>61.6</td>
<td>58.1</td>
</tr>
</tbody>
</table>

Source: State Committee on Statistics.

Key participants in the provision of public services include local authorities; the Council of Ministers of the Republic of Karakalpakstan; and khokimiyats for Tashkent city and local regions. Their functions include:

• Implementing reforms in their respective regions
• Implementing State Programmes
• Developing the tariff policy for housing and communal services, jointly with the Ministry of Finance
• Coordinating the introduction of metering and regulating the consumption of water, gas, heat and other energy sources

Water supply

About 4.5 to 5 billion m$^3$ of drinking water are extracted from underground water sources every year, accounting for 6-8 per cent of total water resources. The other main sources are the open basins of the Amu Darya and Syr Darya, Zarafshan and Kashkadarya rivers. It is important to note that only 10-15 per cent of all water used in Uzbekistan falls within its territory, and more than 40 per cent is taken from groundwater sources.

Water is extracted via:

• Centralized systems (including gas geysers), 60.5 per cent
• Wells (including household wells), 4.4 per cent
• Domestic pumping jack, 14.8 per cent
• Springs, wells, 7.7 per cent
• Rivers, canals, ditches, and others, 7.3 per cent
• Imported water, 5.3 per cent

The State public utilities agency Uzcommunkhizmat manages four inter-regional water pipes, namely, Tuyamuyun-Nukus, Urgench-Tuyamuyun, Damhodzha and Dekhkanabad. It also manages the Hodzhaypak inter-district water pipe and the water main of the Chimgan-Charvak recreational zone. Public water is provided to 82.7 per cent of the population, including 72.6 per cent in rural areas. The water supply covers all cities, 93.5 per cent of urban settlements and 80.2 per cent of rural settlements.

Even so, a total of 6 per cent of urban residents and 21 per cent of the rural population – some 5 million people – have no access to safe drinking water. In some regions of the country (Bukhara, Khorezm, Karakalpakstan), the water supply system coverage stands at only 20-25 per cent. In the Ferghana Valley, for example, more than 40 per cent of the rural population use untreated water from wells and open irrigation ditches for domestic needs. Currently there exist 60,200 km of water lines and supply networks in the drinking water supply system; the capacity of water pipes is 11,360.6 thousand m$^3$/day.

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63 State Committee on Statistics.
66 Head design institute of urban development SUE Uzshaharsozlik LITI.
The infrastructure includes the massive water supply conduit in Karakalpakstan, with a diameter of 1,400 mm and length of 380 km, built in 1990. This represents a strategic backup facility, which provides an additional water supply in dry years.

However, 40 per cent of water is lost in transportation, amounting to about 235 thousand m³ per year over the past 10 years. About 12,600 km of water supply systems (27.1 per cent of the total) are in urgent need of replacement, with more than 31,000 km of networks (50 per cent) requiring major repairs. According to Uzkomnukhizmat, in 2010 22,617 accidents concerning the water supply chain were reported.

Water supply equipment also has deteriorated. A total of 2,495 out of 3,442 power unit equipment units (72.5 per cent) were purchased in the 1950s-1990s, while 2,119 of 4,709 pumping equipment units (46.7 per cent) were purchased before the 2000s. On average, specific energy consumption to raise 1 m³ of water is 0.52 kWh, which is 2-3 times higher than if modern pumping equipment were used.⁶⁷

Water metering fully covers legal entities. However, for housing and apartments with centralized water supply, water meter coverage is less than 50 per cent.

Figure XXIV

**Technical conditions of drinking water supply infrastructure in Uzbekistan**

Water security has received increasing attention. In 2013 national consultations on water⁶⁸ were held in Tashkent as part of the post-2015 development agenda. The following factors were identified as threats to water security:

- Institutional weaknesses of water management and lack of long-term planning
- Absence of an effective legal framework for the regulation of water use at international (cross-border) and national levels

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⁶⁸ Ibid.
• Non-rational and inefficient use of water
• Detrimental interference in the water resource management of local government, agricultural cooperatives (shirkats) and other bodies
• Commercialization of water

Table 11
Water supply system in Uzbekistan

<table>
<thead>
<tr>
<th>Average actual water consumption, litre/day per capita</th>
<th>Average duration of water supply interruptions, hours/day</th>
<th>Loss of water, percentage</th>
<th>Tariff rate, USD/m³</th>
<th>Collection rate, percentage</th>
<th>Extent of coverage with water meters, percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban areas</td>
<td>Rural areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100-700</td>
<td>1</td>
<td>8</td>
<td>45</td>
<td>0.15</td>
<td>80</td>
</tr>
</tbody>
</table>


Wastewater infrastructure

Local sewerage systems are only accessible to 38 per cent of the urban population and less than 5 per cent of the rural population. Of Uzbekistan’s 119 cities, only 79 have communal sewerage services (66.4 per cent). The length of sewer networks and collectors stands at 6,700 km. Total capacity of sewage treatment plants is 4,133,600 m³/day.69

In Tashkent, an unfinished separate system of water supply and sewerage treatment facilities exists, including three facilities with a capacity of 1.9 million m³/day. In rural areas, only about 10 per cent of houses have sewerage. One reason for low sewerage provision is the lack of water, resulting from its value to agriculture. Water consumption in households increases significantly when equipped with sewerage.70 Therefore, creating a conventional gravity sewer is problematic because of no water resources in many areas, meaning that such sewers require significant investment for construction.

Meanwhile, most current treatment facilities require reconstruction.71 It must be noted that the disparity between consumption of water (1.6 billion m³) and sewerage disposal (0.9 billion m³) has led to flooding of human settlements in some areas, as well as to poor health and environmental deterioration.72

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69 SUE Uzshaharsozlik LITI.
70 Main design and research institute Qishloq Qurilish Loyiha Ltd.
71 Agency “Uzkommunkhizmat.”
Centralized heating and hot water supply

Because of Uzbekistan’s cold winters and hot summers, residential premises need to be heated and cooled to ensure favourable living conditions in different seasons. However, only 43.0 per cent of flats are provided with heating. Among apartment buildings, 44.9 per cent have heating.73

The main providers of heating and hot water in urban multi-storey housing are the State regional heating companies “Issiklikmanbai” that re-sell the heat purchased from JSC “Uzbekenergo” (combined heat and power plants, thermal plants). Local authorities currently are responsible for heating and hot water utilities. Uzbekistan has 22 district heat-supplying companies and more than 1,200 boilers that provide heating to multi-family housing, operating as part of district heating companies. In addition, local district heating boilers serve one or several residential houses. Individual houses usually have their own boilers.

Natural gas is the main energy source for heat production. In winters, because of peak loads and a lack of pressure in the natural gas pipeline, some boilers are fuelled by coal and fuel oil.

The vast majority of district heating systems in Uzbekistan were created during the Soviet period. Thus, their operational lifespan has been exceeded, which causes difficulties in ensuring stable central heating and hot water supply. The poor condition of these heating systems is caused by a number of factors, including the high cost of production, transmission and sale of heat. Financial problems also are found, compounded by low productivity of heating enterprises, outdated boilers, and losses in the main heating and in-house pipeline networks due to deteriorated pipes. In 2011, losses amounted to 1.8 million Gcal, or 10.2 per cent of the 17.5 million Gcal of heat produced. Fuel consumption was 155.3 kg/Gcal, significantly higher than the norm of 116.7 kg. Heat losses occur primarily during transportation by heat carrier. The total length of main heating networks in two-pipe calculation is 4,536.7 km.74

Electricity and natural gas supply

JSC Uzbekenergo is also the electricity supplier; almost the entire territory of Uzbekistan has access to electricity. However, while the city of Tashkent has an uninterrupted power supply, this is not the case for all the regions in the country.

Because of deteriorated cable and overhead electrical wire networks (see Figure XXV), electrical energy losses have increased. To date the loss of electric power stands at 18 per cent compared to a recognized standard of 13 per cent.

An overall reduction in deteriorated electrical networks has resulted from the rerouting of 6-10 kV cable lines, financed by Uzbekenergo. However, the degree of deterioration of electrical networks, as well as the number of accidents and injuries, continues to increase as a result of the shortage of funds for regular relaying of cable lines.

In 2011, the electricity tariff was set at UZS 83.6/kWh (USD 0.036/kWh), a tariff more than 12 times higher than in 2001.

73 State Committee on Statistics.
Box III
Water supply and water removal: an example in Tashkent

Tashkent has 100 per cent coverage with water supply and removal.

Technical characteristics of SUE Suvsoz (Tashkent Water Canal):

- Installed capacity of water pipes: 2,326 m³/day
- Length of the water supply and sewerage networks: 3,600 km
- Water lines: 636.3 km
- Distribution networks: 2,994.7 km. Number of pumping stations: 297
- Number of pumping units: 604
- Overall efficiency of treatment facilities: 1,945 m³/day
- Length of sewerage networks: 2,618.1 km
- Including collecting canals: 203.7 km
- Sewerage networks: 2,414.4 km

SUE Suvsoz replaces about 10-15 km of pipeline per year, which is about 10-20 per cent of what is required. Water leaks continue to affect about 15-45 per cent of pipelines.

A difference of about 30 per cent exists between the amount of supplied and removed water, according to reports of SUE Suvsoz. Thus, the imbalance between water consumption and sewerage disposal is not as great in Tashkent as in Uzbekistan generally; however, it still requires an analysis of causes, which may include leakage from arterial canals. Overall, leaks degrade the environment and can affect the integrity of the foundations of buildings and infrastructure.

Source: SUE Suvsoz. The data on the operating parameters of SUE Suvsoz, water supply and sewerage systems in Tashkent.

Photo VI
An example of urban stormwater canalization in Tashkent

Source: A. Fidanza, June 2014.
Box IV

Heat supply: an example in Tashkent

The major producer of heat in Tashkent (more than 80 per cent) is JSC Tashteplotsentral, with a majority stake owned by the municipality. Delivery of heat to consumers is provided through the urban heating network owned by the unitary enterprise Tashteploenergo, a wholesale buyer and a reseller of heat.

The length of heating supply networks in Tashkent is 3,500 km; length of the network in operation during the standard term is 50-90 per cent. In 2013 35 km. of heating systems were replaced, which was funded by UZS7 billion in subsidies and revenues made from collecting service fees.

Source: Unitary enterprise “Toshissikkuvvati”.

Figure XXV

Dynamics of change in the characteristics of cable and overhead electrical wire networks

Source: JSC “Uzbekenergo”.

Natural gas is provided by territorial subdivisions of the State company Uztransgaz. By the end of 2012, the natural gas supply amounted to 17.9 billion m³. This breaks down into the following: Supply to the general population, 12.2 billion m³ (67.9 per cent); supply to utilities, 2.8 billion m³ (15.6 per cent); and supply to other consumers, 2.9 billion m³ (16.5 per cent). The length of the street gas network totalled 105,300 km, 47,000 km of which is in urban areas. Overall, the gas supply reaches 4.5 million houses and flats (80 per cent). During 1990-2012, access to natural gas increased from 44.6 per cent to 83.5 per cent. However, gas supply remains unstable, and gas shortages often occur in winter, especially in rural areas.

More than 80 per cent of household gas consumption is used for heating individual houses (equipped with gas boilers), with around 20 per cent for cooking. In remote areas, where there is no
possibility of supplying natural gas by pipelines, liquefied natural gas is supplied. A total of 473,200 (8.4 per cent) houses and apartments are provided with liquefied gas.  

Box V  
Power supply: an example in Tashkent  

Technical characteristics of the enterprise “Toshkentshaharelekttrarmoklari”, which provides 100 per cent coverage of electricity supply in the capital, include:

- 76 power substations PS35-110 kV  
- Installed capacity PS35 -110 kV of 3,416.8 MW (8.54 per cent of the capacity of the power grid of Uzbekistan)  
- 5,117 transformer substations 6-10 kV  
- Installed capacity of transformer substations of 3,075.4 mV  
- Length of cable lines with voltage 0.4-6-10-35-110 kV: 7,207.7 km  
- Length of overhead lines of 0.4-6-10-35-110 kV: 2,569.9 km  
- Annual consumption of electric energy: 5,114 million KW/ h  

Distribution of electric energy

![Distribution](image.png)

Source: JSC “Uzbekenergo”.

Collection and disposal of household waste

International experience shows that high rates of economic growth, accompanied by rising real incomes, lead to an increase in the amount of garbage per person. In the United States, for instance, it was 650-700 kg/person per year in 2000, whereas now it is 850-900 kg/person per year; the trend of increased amount of waste per person per year is also present globally. Conversely, for Tashkent the rate of accumulation of solid waste, including public buildings, stands at 300kg/person per year. In 2011 the figure was 175 kg, while in 2000 it was 350 kg, this may suggest that the amount of illegal waste disposal is increasing.

With 300 kg of waste/person per year and an overall urban population of 15.6 million people, the potential annual volume of waste in Uzbekistan should be around 4.3 million tonnes, or 17 million m³. However, during 2000-2012 the volume of transported solid waste has decreased from 6.2 to 5.4

75 State Committee on Statistics.  
million m³ per year (equivalent to 80-90 kg/person per year).\textsuperscript{77} Again, this discrepancy may be explained by an increased volume of illegal waste disposal.

Solid waste is mostly comprised of the following: 750-760 thousand tonnes of waste paper, 130-140 thousand tonnes of metal, and 140-150 thousand tonnes of textiles. At the same time, JSC “Uzbek Paper Mill” (with a paper recycling capacity of 24 thousand tonnes per year) and Angren, a cardboard factory (with a paper recycling capacity of 100 thousand tonnes per year), each collected only 10 thousand tonnes of paper waste per year.\textsuperscript{78}

At the end of 2012, the specialized car fleet for clean-up and removal of domestic waste comprised 2,103 units, including 258 watering machines, 18 snowploughs, 1,142 garbage trucks, 156 cesspool vehicles, and 310 lorries and trucks. However, 60 to 70 per cent of these specialized vehicles are outdated.\textsuperscript{79}

The quality of solid waste removal services has been criticized by both residents and officials responsible for street cleaning; no precise account of the volumes of removed solid waste exists. It is difficult to control how much solid waste each vehicle carries, how many laps it completes, and how much time it spends on each site. The density of transported waste varies greatly – it can range from 60-450 kg/ m³ – so waste weight, rather than volume, should be measured. Weighing of waste, as well as its traffic management, would benefit greatly from computerization. For example, several cities in Russia used the experience of EU countries and implemented an integrated system of transporting, receiving and placing of municipal waste, which radically improved the service. In the Russian example, it became possible to assess the volume of incoming waste and determine the actual costs of recycling and disposal.

Landfills receive solid waste, industrial and construction waste, and service sector waste, among others. A significant proportion of landfills do not meet sanitary norms and operational standards. The estimated provision of landfills with water supply is under 20 per cent, and with electricity, 25 per cent. No more than half have driveway access, and only 1 in 6 has administrative rooms. In the absence of special sites, toxic, medical, and biological wastes are illegally disposed of in general landfills, with attendant epidemiological and environmental risks. However, in the absence of a systematic assessment of the impact of landfills on the environment, it is difficult to evaluate compliance with burial and disposal requirements.\textsuperscript{80}

\section*{B. Financial sustainability of the public utility sector}

\subsection*{Public utility tariffs}

According to the Rules for Provision of Utility Services:

- Tariffs for the services of gas companies belonging to the structure of the JSC “Uztransgaz” are approved by the Ministry of Finance
- Tariffs for electricity and heat production, transportation and distribution carried out by enterprises belonging to Uzbekenergo are approved by the Ministry of Finance

\begin{itemize}
\item \textsuperscript{77} Ibid.
\item \textsuperscript{78} Ibid.
\item \textsuperscript{79} State Committee on Statistics.
\item \textsuperscript{80} Centre for Economic Research (2013), “Architecture of Public Utilities: Challenges and Perspectives” (in Russian).\
\end{itemize}
• Tariffs for services of water utilities (sewerage) companies under Government control belonging to the agency Uzkomkommkhizmat, such as the department for operation of inter-regional water pipelines Tuyamuyun-Nukus, Tuyamuyun-Urgench and Damhodzha, are approved by the Ministry of Finance.
• Tariffs for centralized heating, hot water, cold water and sewerage services provided by local enterprises are approved by territorial financial authorities, the Ministry of Finance of the Republic of Karakalpakstan, financial departments of viloyats and Tashkent khokimiyats, in coordination with the Ministry of Finance.
• Tariffs for solid waste removal and sanitation enterprises are approved by financial authorities in coordination with viloyat khokimiyats.

Utility rates appear to have increased at a faster rate than other prices, especially in Tashkent city, but are perceived to remain generally affordable to most people. The share of utility costs in 2010 was 16.7 per cent of total spending on paid services (see Table 12). Utility bills accounted for 6.7 per cent of total expenditures and 8.3 per cent of consumer spending on household expenditures in 2012.81

Table 12
Share of housing and public utility services in the total volume of paid services provided to the population

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid services, total (percentage)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>- Including public utilities</td>
<td>16.6</td>
<td>14.6</td>
<td>16.8</td>
<td>16.7</td>
</tr>
<tr>
<td>• Housing</td>
<td>2.2</td>
<td>1.9</td>
<td>2.1</td>
<td>1.9</td>
</tr>
<tr>
<td>• Utilities</td>
<td>14.4</td>
<td>12.7</td>
<td>14.7</td>
<td>14.8</td>
</tr>
</tbody>
</table>

Source: State Committee on Statistics.

A comparison of household expenditures on housing and public utilities services in various countries shows Uzbekistan has the capacity for tariff increases to ensure the financial sustainability of utilities (Figure XXVI).

Despite the affordability of household utility tariffs, utility service enterprises have incurred significant debts as a result of unpaid bills. This, along with the limited funds of many consumers, does not allow for timely and full payment for services, requiring Government subsidies to improve the district heating situation.

The Government, through the Cabinet of Ministers Resolution No. 300 of 6 November 2013 on Measures for Financial Recovery of Heat Supply and Water Supply, approved a package of measures to improve the efficiency and cost recovery of heat suppliers, including:

• Improvement and updating of legal acts and methodological documents in the field of communal services, to be developed during 2014-2015

81 State Committee on Statistics, Annual Household Survey.
• Development and modernization of the heating system in 28 major cities during 2014-2020
• Development of a programme for installation of building-level heat metres in apartment houses

Another decision of the Government to improve the performance of heat suppliers is the Cabinet of Ministers Resolution No. 197 of 17 July 2014 on Measures to Implement Road Map Programmes for Financial Rehabilitation of Unprofitable Heat-Supplying Organizations. According to this document, local authorities have started to develop schemes for modernization and capital reconstruction of heat supply facilities in 28 major cities. The concept of improvement of heating systems in big cities, as well as preliminary feasibility studies of projects, is being further developed. In turn, this will take into account regional characteristics, as well as the requirements of master plans for urban development.

Figure XXVI
Share of utility services in the expenditures of the population in various countries, 2012 (Percentage)


Assessment of investment priorities

Presidential Resolution No. PP-1446 on Acceleration of Infrastructure Development, Transport and Communications Construction in 2011-2015 was approved on 21 December 2010. It seeks to provide the population with good-quality water and sewerage services, envisaging the implementation of 39 investment projects for a total of USD 1,596.2 million (see Table 13).

The water supply and sewerage sector requires about UZS 3 trillion to bring the worn-out assets in line with regulatory requirements – the equivalent of 4 per cent of GDP (2011). The priority investments projects are the construction of new (and reconstruction of existing) water intake structures, and laying additional branches from pumping stations. Construction of large inter-regional water pipelines is planned, including Tupalang-Huzhaipok, Tuyabuguz-Bekabad, and Kungrad-Muinak, as well as a radical modernization of the Damhodzha interregional water duct. Another

priority that needs to be addressed is the reconstruction and development of sewerage in such cities as Bukhara, Samarkand, Urgench, Ferghana, Chirchik, and Termez. Other important projects are the improvement of the drinking water supply for settlements in the Republic of Karakalpakstan, Khorezm, Kashkadarya, Navoi, Surkhandarya, Namangan, Syrdarya, Samarkand, Jizzakh, and Bukhara viloyat, and in such cities as Ferghana, Kokand, Margilan, Nukus, Namangan.

In 2012, the Government adopted additional measures to improve the provision of good-quality drinking water and sewerage services. It also approved the programme of water supply and sewerage development for 2013-2015, which included specific investments in several locations.

A comprehensive programme exists for the development and modernization of drinking water supply and sewerage until 2020. This includes:

- Inspection of water resources
- Research and selection of existing sources of drinking water
- Modernization and reconstruction of water supply systems for the largest number of customers, especially those in rural areas
- Equipping consumers with tap-water metering devices
- Reconstruction and modernization measures for sewerage facilities, especially in cities where the drinking water supply has already been modernized and reconstruction of sewerage systems is required\(^3\)

To improve the system of communal services and the management of facilities and networks, the Tashkent khokimiyat, jointly with the Islamic Development Bank (IDB), has started investment projects to improve outdoor lighting, sewerage systems and sanitary purification (the latter jointly with ADB).

Table 13
Priority major investment projects of settlement water supply and sewerage development, 2011-2015

<table>
<thead>
<tr>
<th>Project name</th>
<th>Indicator</th>
<th>Total cost of the project (USD million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving the drinking water supply system in the Republic of Karakalpakstan and Khorezm region</td>
<td>713 m(^3)/day, 568 km</td>
<td>38</td>
</tr>
<tr>
<td>Radical improvement of the water supply of cities of Ferghana, Margilan and settlements adjacent to the conduit</td>
<td>104 m(^3)/day, 120 km</td>
<td>45</td>
</tr>
<tr>
<td>Water supply and sewerage service in rural settlements of Kashkadarya and Navoi regions</td>
<td>12.9 cu.m./day, 1,073 km</td>
<td>36</td>
</tr>
</tbody>
</table>

\(^3\) Public utility services agency Uzkomkhizmat.
<table>
<thead>
<tr>
<th>Project Description</th>
<th>Water Supply/M3/day</th>
<th>Sewerage M3/day</th>
<th>Total Km</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water and sanitation in the Surkhandarya region</td>
<td>108.8 thousand</td>
<td>391.3 km</td>
<td>40</td>
</tr>
<tr>
<td>Reconstruction of the sewerage treatment plants and sewerage systems in the cities of Bukhara and Samarkand</td>
<td>242.9 thousand</td>
<td>67.05 km</td>
<td>66.2</td>
</tr>
<tr>
<td>Modernization of the Damhodzha inter-regional water pipeline and connection of the district centres and rural settlements of Navoi and Bukhara viloyats. Reconstruction of the sewerage system of the city of Termez</td>
<td>215 m³/day (water)</td>
<td>299 km (water)</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>25.0 m³/day (sewerage)</td>
<td>24 km (sewerage)</td>
<td></td>
</tr>
<tr>
<td>Reconstruction of the water and sewerage systems of Kokand and Andijan and the water systems of Ferghana, Margilan and the district centre Rishton</td>
<td>466 m³/day (water)</td>
<td>311.3 km (water)</td>
<td>175</td>
</tr>
<tr>
<td></td>
<td>172 m³/day (sewerage)</td>
<td>72.5 km (sewerage)</td>
<td></td>
</tr>
<tr>
<td>Water supply to the Jizzakh viloyat from the Zarafshan River</td>
<td>184 km</td>
<td></td>
<td>142</td>
</tr>
<tr>
<td>Improvement of the drinking water supply of Zarkent, Khodjikent, Iskovot, Bulokboshi, Buston and Yoshlik in Namangan viloyat, the city of Baysun and rural settlements from the Hadzhimaykhona spring of Surkhandarya viloyat, and the Kushrabat district of Samarkand viloyat</td>
<td>516.4 km</td>
<td></td>
<td>58</td>
</tr>
<tr>
<td>Construction of the inter-regional water main Tupalang-Huzhaipok with wastewater treatment plants in Surkhandarya</td>
<td>75 km</td>
<td></td>
<td>116</td>
</tr>
<tr>
<td>Improvement of water supply of the district centres and rural settlements of the Bayavut, Khavast, Mirzaabad, Sardoba and Akaltyn districts of Syrdarya viloyat</td>
<td>508 km</td>
<td></td>
<td>88</td>
</tr>
<tr>
<td>Construction of the inter-regional water supply system Tuyabuguz-Bekabad</td>
<td>105 km</td>
<td></td>
<td>62</td>
</tr>
<tr>
<td>Project Description</td>
<td>Length/Volume</td>
<td>Source</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Reconstruction and development of the sewerage systems of cities Nukus and Takhiatash</td>
<td>31.4 km</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconstruction of the water intake structure Kuytash and the networks in district centres and rural areas of Zafarabad and Arnasaisk areas of Jizzakh viloyat</td>
<td>30 thousand m³/day</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Reconstruction of the sewerage system of the city of Karshi</td>
<td>30 thousand m³/day</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>Reconstruction of the water supply system of district centres Kasan and Mubarak and villages adjacent to the conduit of the Kitab-Shahrisabz groundwater deposit</td>
<td>133 km</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Reconstruction of water intake structures for rural water supply in Chinaz and Zangiata districts, as well as part of Yangiyul district of Tashkent viloyat</td>
<td>87 thousand m³/day</td>
<td>34.3</td>
<td></td>
</tr>
<tr>
<td>Reconstruction of the sewerage treatment facilities of the city of Chirchik, in view of water supply development of Chimgan-Charvak recreation areas</td>
<td>100 thousand m³/day</td>
<td>77.3</td>
<td></td>
</tr>
<tr>
<td>Reconstruction of sewerage systems in Ferghana and Margilan</td>
<td>260 thousand m³/day</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Reconstruction and expansion of the sewerage systems in Urgench, Khiva and Pitnak</td>
<td>81 thousand m³/day</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Improvement of the sewerage system of the city of Tashkent</td>
<td>453 million m³/day (water)</td>
<td>46.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>338 million m³/day (sewerage)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A. Land administration

Goskomzemgeodezkadastr is the mapping and cadastral authority. In Uzbekistan, other State bodies do not engage in land accounting and do not have a land database.

The geodetic base of Uzbekistan is implemented as a State geodetic network. The State levelling grid contains established geodetic coordinates, heights and gravimetric measurements, which serve as starting points for other geodetic, levelling and gravimetric networks, as well as for geodetic work and topographic and other surveys.

Uzbekistan has complete map coverage, and its national maps are maintained by Goskomzemgeodezkadastr using the established scale range for topographic maps and plans. The basic scale for topographic maps of irrigated land is 1:10,000; for the rest of the territory, it is 1:25,000. For urban areas, the primary scale of topographic maps is 1:2,000, while for urban development it is 1:500. The accuracy of topographic maps and plans corresponds to a graphical accuracy of 0.2mm on the scale of the map or plan.

Uzbekistan also has a single system of 20 State Cadastres, created as a Geographic Information System (GIS). There are cadastral layers for:

- Cartographic base
- Land
- Subsoil
- Water
- Forests
- Buildings and structures
- Roads and railways
- Transmission pipelines
- Communication objects
- Energy facilities
- Waterworks
- Protected nature areas
- Production and consumption waste
- Flora and fauna
- Historical and cultural heritage
- Zones of high natural and manmade hazards

Cabinet Resolution No. 1 of 7 January 2014 states that from 2015, an account of land plots will be kept in the land cadastre book. This will contain general information on land users, land composition and quality of farmland, as well as its standard cost; particular importance is to be given to irrigation conditions. In the future, the land cadastre book will become part of the Integrated Information System of Cadastre and Registration of Real Estate, currently under development.
A cadastral register held at district land registry level contains the following information:

- Record number
- Land parcel cadastre number
- Name of the juridical or real person - rights holder
- Parcel postal address
- Type of the right to parcel
- Name of right constituting document, authority/organization and date of issue
- Parcel purpose
- Restrictions of rights to parcel
- Servitude
- Coordinates of the parcel’s centre
- Parcel area in hectares or in m²
- Cadastre assessment as of … (date) – soil score
- Cadastre assessment as of … (date) – value in UZS
- Information about buildings and structures
- Taxation zone, coefficients, date
- Disputable issues, date
- Detailed documentary information and its availability (# of cadastre documentation)

Cabinet Resolution No. 1 of 7 January 2014 also approved a form for the unified State registration of property rights. This ensures maintenance of land rights records, buildings, structures, apartments (flats) and perennial plantings. This registry, as well as the land cadastre book, also will be part of the new Integrated Information System of Cadastre and Registration of Real Estate.

All regions of the country are divided into register zones, housing estates and quarters. To identify the location of a land plot, a national cadastral division system is used, and each land plot is assigned a unique 21-digit cadastral number. This identifier specifies the region, administrative district, cadastral zone, cadastral array, cadastral block and land parcel, as well as whole or partial buildings or structures within it.

Ministries and departments provide information to the territorial bodies of Goskomzemgeodezkadastr on:

- Real estate transactions, within two days of transaction registration;
- Homes and other buildings or structures that are subject to demolition; the territorial bodies of the Goskomarkhitetktstroy provide this within two days of the relevant public authority decision
- Restrictions on transfer of property and liens imposed against it, provided within two days by the Department of Enforcement of Judgments, court logistical and financial support under the Ministry of Justice, bodies of prosecution, and the Interior and National Security Service
- Status of property and land tax (single land tax) debt, provided by the State Tax Committee according to established requirements to restrict access to information in real time

Applications to update the cadastral register can use the web-based service "Uzbek Land Register," introduced by Goskomzemgeodezkadastr in 2011. This provides cadastral and registration services using a one-stop-shop principle and encompasses:

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Five types of online public service are available through the website. It contains information on:

- Land resources
- State registration of rights to real estate
- Order and composition of documents submitted for State registration rights to land plots
- Order and content of documents submitted for State registration of rights to buildings and structures
- Natural/geographical conditions and the historical/cultural heritage of the Republic of Uzbekistan

Real estate buyers can register online with an e-signature, obtained through the Digital Key Registration Centre. Although application for registration is electronic, it still must be supported by documentation sent separately by post.

The Presidential Decree “On measures for further development of the National Information and Communication System,” dated 27 June 2013, Number PP-1989, establishes the integrated cadastre information system. Real estate registration follows from this, given standardization of data collection and processing as well as the creation of a National Geographic Information System being implemented from 2013 to 2017 as part of e-government system components.

Where it is discovered that the cadastre is incorrect, it can be corrected by supporting documents from an authorized official. Complaints must be submitted in writing to the central office of the Committee, which reviews them, then sends them to the relevant departments. Some complaints are considered by committee experts on-site, and in some cases they are sent to regional offices for consideration. Correction of legal errors and compensation for losses caused by land registry errors can be recovered only by a court order, and only if employees of Goskomzemgeodezkadastr were at fault.

The State registration of property title or rights is mandatory under Paragraph 8 of the “Regulations on the procedure of State registration of rights to immovable property and transactions with them.” This was ratified by Cabinet Resolution No. 1 of 7 January 2014. This states, “Legal and natural persons who own or have interest in immovable property, or their authorized representatives, must inform the agency carrying out local State registration. This must be done within one month after emergence, transfer, limitation or termination of the right of ownership or other interest in immovable property, or change in the legal status of the real estate.” Even so, the State land cadastre is not yet complete; no data exists on many land plots, and a full record is not always kept in cities and towns.

For any country, land registry is always a sensitive subject, and the rules vary between countries. The Uzbekistan register is not open to public inspection, but Goskomzemgeodezkadastr shares information with law enforcement agencies and other public authorities. Article 84 of the Civil Code states: “The body carrying out State registration of real estate rights and transactions is obliged to provide information on any person’s registrations and rights. This information is available from any office responsible for real estate registration, regardless of the actual place of registration.”

Because the register is semi-closed, there is no business case for it to be transparent in its dealings. However, if private ownership of land should become the norm in Uzbekistan, the role of
Goskomzemgeodezkadastr will become much more significant. In that case, a cadastral agency using a private land ownership model will need to be supported by a strong legal framework, as well as robust institutional and technological infrastructure.

B. Land use

The 1998 Land Code establishes the following principles for land use in Uzbekistan:

- Establishment of a fund set up to improve land quality and soil fertility as a vital natural resource
- Ensuring of sound, effective and targeted use of land
- Provision of State and other support to improve the fertility of reclaimed agricultural land, along with land conservation
- Prevention of damage to the natural environment, thereby providing environmental security
- Promotion, through various forms of ownership and land use, of equality of participants in land relations, including protection of their legitimate rights and interests
- Payment for land use
- Provision of a complete record of State land, with full access to information

Two State committees share responsibility for effective land management, but have different mandates; these are the State Committee for Nature Protection, and Goskomzemgeodezkadastr.

The State Committee for Nature Protection exercises State control over land pollution and other industrial waste, chemical effluents and radioactive substances, as well as over sewerage. It also is responsible for general land use and environmental protection, as well as for protection of recreational and water-resource land. For its part, Goskomzemgeodezkadastr exercises State control over land use policies not covered by the State Committee for Nature Protection.85

Since Uzbekistan’s independence in 1991, the law has remained rooted in its former Soviet history. Land use is directed by the State at central and local levels to ensure productivity of crops essential to the national economy, such as cotton and wheat. Farmers have land use rights granted by *khokimiyat* officials based on highest bids, and tied to successful productivity. These rights may be either:

- The right of inheritable possession of land for individual housing construction or *dekhan*86 (small) farming
- Tenants’ rights to lease the land, unless otherwise provided by contract or by law

According to Part 5 of Article 24 of the Land Code, land leased out cannot be sold, mortgaged, given away or exchanged. Only the right to lease the land can be offered as surety against a loan, and then only with the consent of the landlord, unless the law or lease agreement states otherwise.

The inability to have secure tenure, transfer leases or use them as a source of credit all represent serious investment impediments, for example, with regard to farming equipment upgrades, soil quality improvements and general farm innovation. Meanwhile, a growing rural population and a declining

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85 Goskomzemgeodezkadastr.

86 According to USAID in Uzbekistan, since 1999 the term *dekhan* is used for a formalized form of household (plot) farm, which employs the household labour force, and for the private plot given to the head of household. At the same time, State ownership of land remains unchanged, with only different forms of leaseholds in place. Available from http://pdf.usaid.gov/pdf_docs/PNADC874.pdf (accessed 5 May 2015).
Agricultural sector have led to increased inequality between rural and urban areas, which create challenges in addressing low living standards. According to the World Bank, in 2013 14.1 per cent of the population lived below the poverty line, of whom 57.4 per cent lived in rural areas.

Table 14
Land categories of Uzbekistan, as at 1 January 2013

<table>
<thead>
<tr>
<th>Number</th>
<th>Categories of land resources</th>
<th>Total area (thousand hectares)</th>
<th>Including irrigated land</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Ratio (percentage)</td>
<td>Total</td>
</tr>
<tr>
<td>1</td>
<td>Agricultural land*</td>
<td>20,481.1</td>
<td>46.12</td>
</tr>
<tr>
<td>2</td>
<td>Settlement land</td>
<td>214.1</td>
<td>0.48</td>
</tr>
<tr>
<td>3</td>
<td>Lands used for industry, transport, communication, defence and</td>
<td>914.5</td>
<td>2.06</td>
</tr>
<tr>
<td></td>
<td>other purposes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Lands used for nature protection, health improvement and</td>
<td>75.9</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>recreational purposes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Lands used for historical and cultural purposes</td>
<td>6.2</td>
<td>0.01</td>
</tr>
<tr>
<td>6</td>
<td>Forestry fund lands</td>
<td>9,636.9</td>
<td>21.70</td>
</tr>
<tr>
<td>7</td>
<td>Water fund lands</td>
<td>831.4</td>
<td>1.87</td>
</tr>
<tr>
<td>8</td>
<td>Land reserve</td>
<td>12,250.2</td>
<td>27.59</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>44,410.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Agricultural land use = arable land, 10.83 per cent; permanent crops, 0.83 per cent; other, 88.34 per cent (2001).
Source: Goskomzemgeodezkadastr.

A discussion of Uzbekistan land use would be incomplete without the mention of the critical issue of water and irrigation. Eighty per cent of the country is classified as desert or semi-desert, and of 20.5 million agricultural hectares, only 4.2 million are irrigated land. Therefore, a lack of access to water has a strong influence on Government land policy and the issue of land privatization. However, in some cases evidence is emerging that unaccountable and opaque land allocation processes have led to valuable agricultural land being taken out of the rural economy for housing construction, leading to economic losses.
C. Land valuation and taxation of real property

Land valuation

According to the UNECE publication “Land Administration Guidelines With Special Reference to Countries in Transition” (1996), “In countries of East and Central Europe currently in transition, the cadastral system was based on the Russian model and focused on land use. Land was ‘valued’ in terms of its agricultural potential, based on soil types, climate, rainfall, etc., and the farmers were then instructed to grow appropriate crops. This concept of the term ‘value’ is only indirectly connected with the sort of valuations that are needed to manage land in a market economy.”

This principle may explain why Uzbekistan’s Land Code has no information on land valuation, making information difficult to obtain. No information about valuation methods was received, although national experts confirmed that “determination of standard value of farmland is done by the State Research and Design Institute Uzdaverloyikha, employing the income method.”

According to Articles 27 and 55 of the Land Code, rights on inheritable possession of up to 0.04 hectares for individual housing construction or 0.06 hectares for dekhan farming are sold via formal auctions held by khokimyat officials. Interviews on-site showed that newly built detached houses (part of the State Programme on Construction of Model Detached Housing in Rural Areas; see also Chapter IV), are valued based on recovery of project costs, not on construction and land costs.

Land taxation

According to the Tax Code, legal entities and individuals pay land tax, while agricultural producers pay a single tax on land.

The tax is paid on land plots that are:

- Provided in lifetime inheritable possession for dekhan farming
- Provided in lifetime inheritable possession for individual house construction
- Provided for collective gardening, viticulture and horticulture, as well as for individual garages
- Provided for employment-related land allotment
- In ownership, possession and use, together with the dwelling-house and buildings, by inheritance, gift, or as a result of acquisition
- Legally acquired as private property
- Provided for use, or lease, for entrepreneurial activity

The taxable base is the land area recorded by the State authority registering rights to real estate. It is determined by the standard taxable land value, set by Goskomzemgeodezkadastr. Land tax rates, and the single land tax, are set annually by Presidential Decree. Legal entities using agricultural land and opting not to pay a single land tax calculate their land tax based on the area of land and the quality of agricultural irrigated land.

Land tax for non-agricultural land is based on the area and location of the land plot. Towns and cities are divided into zones, by availability of utilities and social infrastructure, for which different tax rates

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are approved. Thus, Tashkent is divided into five zones, smaller cities into four, towns into three and villages into two.

The Tax Code provides a system of benefits for taxpayers of land tax and the single land tax. Calculation of property tax payable is based on cadastre information. The volumes of real estate objects that have been valued for taxation purposes are shown in Table 15.

Table 15
Number of real estate objects that have been valued for tax purposes (mass valuation date), 2010

<table>
<thead>
<tr>
<th>Object type</th>
<th>Quantity (thousands)</th>
<th>Percentage of total taxable property</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apartments in cities</td>
<td>1,049.8</td>
<td>98.5</td>
</tr>
<tr>
<td>Apartments in rural areas</td>
<td>111.4</td>
<td>93.0</td>
</tr>
<tr>
<td>Houses in cities</td>
<td>1,603.2</td>
<td>80.0</td>
</tr>
<tr>
<td>Houses in rural areas</td>
<td>1,380.6</td>
<td>68.0</td>
</tr>
<tr>
<td>Commercial premises</td>
<td>156.6</td>
<td>97.5</td>
</tr>
<tr>
<td>Agricultural plots up to 0.35 hectares</td>
<td>2,380.6</td>
<td>68.0</td>
</tr>
</tbody>
</table>

*Source: Goskomzemgeodezkadastr.*

Based on information provided by national experts, the Uzbekistan land taxation system adheres to international good practices as set out in the UNECE “Land Administration Guidelines with Special Reference to Countries in Transition.” Good practices are defined as:

- Serving clearly defined social objectives
- Raising significant amounts of revenue
- Controlled exclusively by Government authorities
- Administered so that the public understands it and sees it as fair
- Relatively simple and cheap to collect
- Designed to make it difficult to avoid making payments
- Distributing the tax burden equitably across the community
- Encouraging good use of resources

**D. Land policy**

Land policy is a part of national policy for promoting economic development, social justice, equity and political stability. Land policies associated with land privatization include:

- Security of tenure
- Land markets (particularly land transactions and access to credit)
- Real property taxation
- Sustainable management of land use, natural resources and the environment
- The provision of land for poor people, ethnic minorities and women
• Measures to prevent land speculation and manage land disputes.88

For the Government of Uzbekistan, a key issue is to balance owners' rights with the need to regulate land use in society’s best interests.89 The Government seeks to protect the land’s productiveness, avoid land speculation and prevent the emergence of landowners who take no active part in land management. It also needs to preserve the principle that land is worthless without water, and that water is a national resource provided through the State irrigation system.

The answer is a national land policy that enables diversity and change, and that will foster more urban and rural prosperity than one tied to a specific economic model.90

Land issues can be analyzed horizontally as complexity increases, or vertically, by hierarchy (see Figure XXVII). This hierarchy should be kept sustainable by four principles: economic (profit), environmental (planet), social (people), and good governance. Governance determines if individual people or communities can acquire rights and duties to use land and other natural resources. Land policy, as the most complex land issue, is followed by land management, fulfilling political objectives and achieving sustainable development. It is the process by which a country’s resources are put to good effect.91

As already highlighted, since gaining its independence, Uzbekistan has decided not to change to its land policy framework, opting instead in favour of more gradual reforms in the land sector. It has, therefore, largely avoided a complex and volatile transitional phase. Multiple agencies were established, each charged with specific responsibilities and administration of particular land resources. Records kept during Soviet times were dispersed among these independent agencies.

The challenge now is to assist the land policy framework to move away from large-scale, centralized planning toward more of a market economy. At its core, this will involve increasing legal ownership of land by individuals, families and farmers.92

In this regard, the Government can benefit from best practices accrued in many other countries’ models, especially in other CIS or former Soviet republics. It will be essential to choose those most relevant for the current situation in Uzbekistan, with realistic policies that preserve aspects of land administration that are important to the nation, but that provide opportunities for more inward investment through greater security of land tenure.

Figure XXVII

Hierarchy of land issues embedded in sustainable development

A. Public and private funding of housing, land management and land use

Construction investment

Housing is a national priority for Uzbekistan, and Government policies aim to ensure sustainable growth of non-budgetary housing investment. Total housing investment in 2000-2012 increased by a factor of 46.6, to UZS 4.5 billion (4.67 per cent of GDP), while in 2013 it increased by another 28 per cent, to UZS 5.8 billion. Citizens' assets comprised 81.6 per cent of total investment in 2012, with bank loans accounting for 11.6 per cent and public funds for less than 1 per cent. Government investments are mainly intended to encourage model housing construction in rural areas, as highlighted above.

Table 16
Dynamics and structure of residential investment in Uzbekistan
(Billions of Uzbek Soms)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total housing construction investment</td>
<td>96.8</td>
<td>347.2</td>
<td>2,316.8</td>
<td>3,342.5</td>
<td>4,514.0</td>
</tr>
<tr>
<td>including:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public purse, non-budgetary funds and other centralized sources</td>
<td>-</td>
<td>-</td>
<td>44.4</td>
<td>33.8</td>
<td>39.2</td>
</tr>
<tr>
<td>Non-budgetary investment</td>
<td>-</td>
<td>-</td>
<td>2,272.4</td>
<td>3308.7</td>
<td>4,474.8</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companies' assets</td>
<td>-</td>
<td>-</td>
<td>125.0</td>
<td>163.7</td>
<td>263.7</td>
</tr>
<tr>
<td>Citizens' assets</td>
<td>-</td>
<td>-</td>
<td>1,847.8</td>
<td>2,705.4</td>
<td>3,685.4</td>
</tr>
<tr>
<td>Bank loans and other borrowed assets</td>
<td>-</td>
<td>-</td>
<td>293.3</td>
<td>405.0</td>
<td>519.0</td>
</tr>
<tr>
<td>Foreign investment and loans</td>
<td>-</td>
<td>-</td>
<td>6.4</td>
<td>34.6</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Source: State Committee on Statistics.

Usually, housing construction is financed by developers taking out bank loans, secured against the construction itself, and with mandatory insurance. These loans make up 70 per cent of the housing investment; the remainder is financed by the developers’ own assets.

In the national programme, as already noted, the single customer for model housing construction projects is an engineering company, Qishloq Qurilish Invest, specifically created for this purpose. It tenders for a contractor, who will receive an advance of 15-25 per cent of construction costs,
including construction materials purchased by Qishloq Qurilish Invest at cost. The contractor receives further finances in tranches, twice per month, from Qishloq Qurilish Invest funds, obtained from the future homeowners’ assets, either owned or loaned.

According to experts, the housing development profit ratio is quite high, at 30-40 per cent, due to high risks in construction and fundraising. In the Government programme, private developers have access to loans from the Ministry of Finance, the Central Bank, the National Bank, Qishloq Qurilish Bank and ADB. As a result, contractors agree to reduce the profit ratio down to an estimated 15-20 per cent.

Refurbishment investment
As this Country Profile has made clear, almost all Uzbekistan housing stock is owned by the citizens who live in it, and 83.2 per cent was built prior to 1990. This indirectly highlights a vital need for refurbishment because, according to the Article 24 of the Housing Code, homeowners in apartment blocks must pay for maintenance and refurbishment works. Government and homeowners shared the refurbishment costs of pre-1991 buildings not refurbished before privatization: The Government provided 70 per cent via grants; the remaining 30 per cent was provided by homeowners and sponsors. From 2002-2010, more than 22 thousand apartment blocks were refurbished with State grants.

Housing energy retrofitting has not thus far been a top Government priority; given limitations on public funds, it has been considered more efficient to ensure the energy retrofitting of non-residential buildings. At the same time, commercial banks providing housing maintenance loans do not require borrowers to carry out energy retrofitting measures. Some banks provide loans for solar batteries, but energy retrofitting loans are not provided regularly.

Land investment
As noted in Chapters II and VIII, land in Uzbekistan is not for sale, exchange, donation or pledge. This lack of land rights has led to land improvements being unattractive for private investors.

The public purse remains the main funding source for land administration. However, some funds for property registration and cadastre system development were supplied by international cooperation projects. Until August 2014, registration fees were sufficient to finance property rights registration, but not to finance measures needed to enhance land management practices. Since then, property rights, public registration and information services must be provided free of charge, although no sources of funding have been determined for this.

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93 According to the World Bank's Doing Business report, in 2014 Uzbekistan's overall performance ranked it 146th out of 189 countries on the ease of doing business; notably, it was 159th in terms of obtaining construction permit, 138th on the strength of investor protection index, and 130th on the ease of loan provision.
94 Local experts' estimates.
96 Since 2007, Uzbekistan has been implementing a project to supply housing stock with cold and hot water meters, financed by a loan from CHINA EXIMBANK PBC for USD 17.3 million over a period of 20 years.
97 With a few exceptions, determined by the legislation of the Republic of Uzbekistan.
98 In 1997-2007, Uzbekistan received technical assistance for land administration, particularly to create cadastre and property registration systems, under five EuropeAid projects and one ADB project; the total amount involved was USD 6.08 million.
B. Housing affordability and public housing support of low-income households

Currently, at Government level there is no centralized collection of property-value statistics; only information provided directly by realtors is available. The State Committee on Privatization, Demonopolization and Development of Competition planned to start accumulating these statistics in 2014-2015.

In 2015, the property value of the Tashkent secondary housing market was USD 723 per m².100 Two- and three-room apartments are the most-purchased housing units; in 2013, the average floor space of purchased housing was 63 m².101

However, as noted above, such price levels are unaffordable for most households, with an average housing affordability index102 of 5.9 years (3.8 years103 in Tashkent). In 2013 14.1 per cent of people in Uzbekistan remained below the poverty line.104

According to the Government’s Institute for Social Research, individual housing construction costs (if paid solely by the homeowner) are about USD 230 per m². This is about 35 per cent of the finished market value, and a much more affordable option. Many people take this option, so that the country's average housing affordability index is 2 years.

To improve housing affordability and provide access to better living conditions for low-income households, the Government implements a range of targeted programmes. The most significant is the State Programme on Construction of Model Detached Housing in Rural Areas, detailed above, which supports the substantial rural population. This programme was launched in 2009, and was joined in 2011 by the ADB, which provided USD 500 million in subsidized loans to individual developers with average/below-average incomes from 2012-2015.

As noted above, if rural dwellers meet the criteria set by the agreement between Uzbekistan and ADB, they can receive subsidized mortgages of up to 75 per cent of housing value (but not exceeding 1,000 minimum monthly wages) for 15 years. The yearly interest rate in the first five years is 7 per cent, compared to the average market loan rate of 14-19 per cent; thereafter, it increases to 0.9 of the refinancing rate of the Uzbekistan Central Bank – up to 9 per cent per year as of July 2014. Moreover, participants of the programme are wholly exempt from income tax for the mortgage repayment period.105

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100 Газета.UZ, Цены на квартиры в Ташкенте продолжают падать (The prices on flats in Tashkent continue to decrease), 9 October 2015, available from http://www.gazeta.uz/2015/10/09/realty/ (accessed 22 October 2015).
101 State Committee on Privatization, Demonopolization and Development of Competition.
102 Housing affordability index is the ratio of an average apartment value to an average household yearly income.
103 According to the State Committee on Statistics, an average household in the country consists of five people (3.8 people in Tashkent) and average income is UZS 3,166.5 thousand (UZS 6,458.7 thousand in Tashkent).
105 Resolution of the Ministry of Finance of the Republic of Uzbekistan, Ministry of Economics of the Republic of Uzbekistan and State Tax Committee of the Republic of Uzbekistan No. 1449 of 24 December 2010 on Approval of the Procedure for Calculation and Payment of the Single Tax Payment Taking into Account Introduction of the Minimum Size of the Single Tax Payment. A minimum tax rate of 10 percent of income is applied if income falls short of a total of five minimum monthly wages. If income is 5-10 minimum monthly wages, then a tax rate for a total of five minimum monthly wages is applied, along with a 16 percent tax rate for the amount exceeding this total. If income is 10 minimum monthly wages, then the rate for 10 minimum
To prevent profiteering in the real estate market, the programme states that participants must use the housing purchased as their primary residence for five years. Borrowers cannot sell or lease housing acquired via the programme.

Furthermore, to reduce the cost of housing constructed under the programme, the Government provides developers with a free land plot, supplied with utility lines. In addition, it ensures the purchase of construction materials at prime cost.

Virtually all stakeholders taking part in this programme enjoy tax benefits. These include exemption from profit tax, property tax, customs payments, and payment to the Republican Road Fund. Companies with these tax exemptions include the Qishloq Qurilish Bank, the engineering company Qishloq Qurilish Invest, contracting and subcontracting agencies, as well as companies producing construction materials.

Total funds provided under the rural model housing construction programme in 2009-2012 amounted to UZS 1.96 trillion. Notably, only in 2012 was investment wholly from the public purse, in the form of Ministry of Finance loan facilities. This came to UZS 906 billion, or 4 per cent of total fiscal revenues for this period.

A key demographic characteristic of Uzbekistan is the high percentage of young people, with some 60.2 per cent being younger than age 30. For this group, the Government has a subsidized mortgage programme with an interest rate equal to the refinancing rate of the Uzbekistan Central Bank. As of September 2014, this amounted to 10 per cent per year for 15 years, including a grace period of three years, with an initial payment of not less than 25 per cent. The programme is available to young households with spouses under 30 years old, and married for the first time. Under the easy-term loan programme, young households also are provided with micro-loans for business activities not exceeding 1,000 minimum monthly wages (UZS 96.5 million). The reduced micro-lending rate is 0.5 of the refinancing rate of the Uzbekistan Central Bank.

For households with income below the minimum monthly wage, as well as for socially insecure citizens, the law establishes a special municipal housing fund. This fund provides housing via a lease agreement, with no right to privatization. Taking into account fiscal revenues, limitations and dynamic housing privatization, however, the fund’s housing stock is currently low and of low quality.

The Government also provides housing options for orphaned children when they become adults: If no housing can be provided from municipal housing stock, local authorities purchase it at their own cost or from public funds. Further, State support to military personnel who need to improve their
housing conditions includes both homeownership grants upon 10 years’ service or support with rented housing.

C. Housing funds and their connection to housing policy

Role of national and local housing funding authorities

As highlighted throughout this report, Uzbekistan is implementing programmes to improve citizens’ housing conditions. Nevertheless, a specific household selection system based on the analysis of citizens’ demand and needs still could be elaborated.

All programmes and initiatives are developed by the Cabinet of Ministers or implemented under Presidential initiatives. The Ministry of Economy and its regional offices are actively involved in development and implementation of target programmes. These include specific investment projects in the housing sector, as well as development of engineering, communication and social infrastructures. Support also exists for the construction industry and for other areas of the economy directly related to development of a housing market.

The role of local authorities is to implement objectives set at the national level. Local authorities do not usually make significant changes to the national programme implementation mechanism and, because of limited funds, do not implement their own programmes.

Availability of housing funds

In 2012, according to the Ministry of Finance, aggregate State fiscal revenues in the Republic of Uzbekistan (excluding special-purpose funds) stood at UZS 21,295.7 billion. About 20 per cent of fiscal revenues were from indirect taxes such as VAT and excise duties. The direct tax that provides the maximum contribution to total tax revenues is personal income tax, comprising about 10 per cent. At the same time, the target tax on enterprises to improve social infrastructure is small; its share accounts for only 2.7 per cent of overall revenues. Land tax and property tax revenues comprise only 5.7 per cent of aggregate fiscal revenues.

The largest national housing finance programme is the State Programme on Construction of Model Detached Housing in Rural Areas, implemented by the Government in cooperation with ADB. According to the Ministry of Finance, in 2012 the total funds for this programme, all sources included

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112 The aid covers 25 percent of the acquired housing cost. It is funded by the relevant Ministry out of the Ministry of Defence, Ministry of Foreign Affairs, Ministry of Emergency Situations, and the National Security Service. The Mortgage Lending Support Fund provides a loan for the remaining amount.

113 Compensation amounts to 2-6 minimum monthly wages and depends on rank, household structure and duty station (Resolution of the President No. PP-112 of 30 June 2005 on additional Measures of Ensuring Social Protection of Military Servicemen of the Republic of Uzbekistan.

114 According to Chapter 9 of the Fiscal Code, non-budgetary special-purpose funds include the non-budgetary Pension Fund and the Republican Road Fund; the Fund of Reconstruction, Overhaul and Equipping of Educational and Medical Institutions; the Fund of Development of Material and Technical Basis of Higher Educational Institutions under the Ministry of Finance; and the Special Privatization and De-nationalization Fund.

115 According to the Presidential Resolution No. 1449 of 24 December 2010, the property tax rate amounts to 3.5 percent of the tax base (in some cases, this rate may be reduced by another 30-50 percent). For real property of individual citizens the rate is 0.75-1.13 percent of the inventory value, depending on the property type and floor space. The land tax rate varies according to the purpose and use of the land and is set in monetary terms per hectare. The social infrastructure improvement and development tax rate amounts to 8 percent of the net profit of legal entities.
(Ministry of Finance, commercial banks, citizens and ADB) amounted to about UZS 906 billion. The Ministry of Finance loan facility accounted for UZS 130.6 billion of this. Since the programme’s launch in 2009-2012, aggregate public funds amounted to UZS 1,962.1 billion (3 per cent of fiscal revenues), while ADB's funds accounted for UZS 342.4 billion and citizens' and commercial banks' funds were UZS 882.7 billion. The IDB was expected join the programme in 2015; it will provide USD 100 million of finance. Funds provided to other programmes to support homeownership are much smaller.

Overall, banks have severely limited housing finance capabilities. The main funds for such loans come from bank deposits, which represent most of the bank’s assets. Under the national programme, banks can now obtain additional resources to provide loans; as a result, in 2012 they were able to provide some 82 per cent of mortgages in the programme.

Meanwhile, partnerships of private homeowners have access to refurbishment loans at any commercial bank under the following conditions: for 2 years, with an interest rate not exceeding the refinancing rate of the Central Bank, secured against property,116 securities, third-party guarantees (including public authorities), or liability insurance policy for the borrower.

No information on the accessibility of such loans is available, but presumably they would be in great demand. There is, after all, a high need for refurbishment works, and nearly 5,000 private homeowners partnerships manage 92 per cent of apartment blocks.

### D. Financial sector and mortgage loans

According to the World Bank,117 banks in Uzbekistan hold 95 per cent of total financial sector assets; as of June 2014, there were 27 banks. All lenders, including non-banking agencies (largely microfinancing agencies118) and pawn shops, undergo mandatory licensing and are regulated by the Uzbekistan Central Bank.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013 (estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local banks' equity capital profitability, percentage</td>
<td>7.4</td>
<td>7.7</td>
<td>14.4</td>
<td>16.2</td>
<td>15.0</td>
</tr>
<tr>
<td>Own-assets profitability</td>
<td>1.5</td>
<td>1.2</td>
<td>1.9</td>
<td>1.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Market share of the three largest banks</td>
<td>55.0</td>
<td>52.0</td>
<td>53.5</td>
<td>51.6</td>
<td>50.0</td>
</tr>
<tr>
<td>Market share of State and non-commercial banks</td>
<td>76.0</td>
<td>77.0</td>
<td>76.0</td>
<td>77.1</td>
<td>80.0</td>
</tr>
</tbody>
</table>

Source: Calculations of Standard & Poor Financial Services LLC (S&P); estimations based on the data from the International Monetary Fund.

116 Property to be pledged may be liquid property, including production and social infrastructure facilities, vehicles, and borrowers’ other liquid assets, with the exception of residential buildings, apartments and items essential to the vital activities of the borrowers' households
118 According to data available from the Uzbekistan Central Bank, there were 26 acting micro-lending agencies (as of September 2013) and 44 pawn shops (as of July 2013).
In all, Uzbekistan's banking sector is developing sustainably, with limited exposure to global risks. Total assets of the banking sector in 2012 stood at 37 per cent of GDP, with related capital comprising 6.4 per cent of GDP. In 2003, according to official data, capital adequacy in the banking sector was 24.3 per cent, but according to a 2013 estimate by Moody's Investors Service, on average Uzbek banks with an international ranking were at 12.3 per cent. Thus, Uzbek banks are reasonably profitable compared to banks in other CIS States; return on average assets (ROAA) is about 1.5 per cent, and return on equity is between 15-20 per cent.

According to Fitch Ratings Inc., bank lending business is fast-growing, with an increase of 28 per cent in 2013 against a background of vigorous economic growth and low level of loan penetration; the ratio of loans to GDP was 22 per cent at the end of 2013. However, according to the Centre for Economic Research, since 2000 the development of the banking sector has trailed overall economic development, with loaned funds accounting for only 11.4 per cent of total investment.

One of the main challenges hindering provision of sufficient funds for the economy is the continued prevalence of State banks. State banks have between 50 and 80 per cent of total banking sector assets, according to various estimates.

The continued dependence on State funding also creates risks for the sector. According to international rating agencies, factors hindering banking sector development include a weak institutional and legislative framework, lack of diversification of activities, and State funding.

Development of retail banking in Uzbekistan also is insufficient. According to Standard & Poor Financial Services LLC (S&P), the level of retail lending penetration (ratio of retail credit volume to GDP) stood at only 3 per cent in 2012, compared to more than 50 per cent in developed countries. A low level of household savings limits the resource base of the banks, and therefore limits their lending activities. Figures from 2011 show that total bank deposits of individual citizens per capita were only USD 116, most of which was used by the banks to provide loans to corporate customers.

In 2002 the Government adopted a Citizens' Bank Deposits Insurance Act dated 5 April 2002, Number 360 II and created the Bank Deposits Insurance Fund (Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 326 of 20 September 2002), which makes deposit compensation payments of up to 250 minimum monthly wages. To insure deposits from potential adverse effects of the global financial crisis of 2008, the payment restrictions were subsequently cancelled.

International rating agencies state that the major source of funding for banks is short-term bank deposits, largely made by legal entities; at the end of 2013, the share of all bank deposits was 60-70

119 According to S&P, the share of foreign loans in the Uzbekistan banking system liabilities is about 10 percent. (S&P, Banking Industry Country Risk Assessment: Uzbekistan. 23 December 2014).
Government financing, in the form of loans from the Ministry of Finance, deposits from the Fund for Reconstruction and Development, and assets of other Government agencies, amounts to about 20 per cent of the sector’s liabilities. External foreign loans are attracted mainly under State-supported project financing programmes and comprise 10 per cent of sector liabilities.

Following international recommendations, the Uzbekistan Central Bank and the Government have focused on banking sector development. The Presidential Resolution of 26 November 2010 on Priority Guidelines for Further Reforms and Improved Stability of the Financial and Banking System of the Republic in 2011-2015 and Ensuring High International Ranking in 2015 intends to double the banking system aggregate capital compared with 2011, increase deposits by a factor of 2.5, and increase the number of non-banking lending agencies by a factor of 1.7.

In 2011, the Cabinet of Ministers Resolution No. 197 of 23 April 2004 on Measures to Build an Information Recording System for Borrowers’ Credit Histories led to the Government adopting a Credit Information Exchange Act. It also created the National Institute of Credit Histories, with compulsory involvement of all banks. To obtain the credit history of a prospective borrower, the loan supplier sends a request to the Uzbekistan Central Bank.

When developing underwriting standards, lending agencies could take these factors into account in evaluating household payment capacities. However, as transferred incomes may be irregular or seasonal, it will be necessary to allow for households to meet their financial obligations without them.

**Mortgage market and its players**

The mortgage market in Uzbekistan was created in 2006 after the adoption of the Mortgage Act. Because of the lack of land rights noted throughout this document, mortgage loans are available only for buildings, not land.

Currently, the country has the legal frameworks essential for the operation of a mortgage market, as well as the critical infrastructure. About 170 realtor agencies and 34 insurance companies exist.

Nine banks currently operate in the housing mortgage sector. They provide funding for the construction and purchase of residential housing units, at primary and secondary markets, to borrowers who meet standard lending criteria. The joint-stock commercial mortgage bank Ipoteka Bank provides about 70 per cent of mortgages.

The Ipoteka Bank and other lending banks have task forces to develop new business activities. Mortgages for young families and first-time buyers (under 30) who meet the lending criteria are given easy terms and low interest rates for standard mortgage terms, with full income and property tax exemption, as noted above. Another target group for subsidized mortgages includes participants in the State Programme for rural model housing construction.

As a rule, banks provide loans under annuity or differential repayment schemes, for up to 12 years and with a yearly interest rate of 14-19 per cent in national currency. The initial payment should be at least 25 per cent. Virtually all programmes have a grace period, when borrowers only make interest payments without repayment of the principal amount of the loan. In all national programmes, interest rates do not exceed the refinancing rate of the Uzbekistan Central Bank (10 per cent), and borrowers are exempt from income and property taxes during the mortgage repayment period.


128 In national programmes, this period is up to three years, while for market loans it may not exceed one year.
Under national programmes, real property is insured only by the developer at the construction stage. Furthermore, given that property values are determined by relevant Resolutions of the Cabinet of Ministers, no evaluation of mortgaged property is necessary. In fact, borrowers are charged only for the completion of the sales contract and mortgage, as well as their registration with the relevant authorities. By way of contrast, if borrowers take mortgages on market conditions, they also are charged for completion of the sales contract, mortgage agreement, insurance and valuation of mortgage assets, as well as any bank fees.

Box VI

**Loan terms of Ipoteka Bank**

| Loan amount: Up to 75 per cent of housing construction costs (acquisition) |
| Loan period: Up to 15 years |
| Loan sum: |
| • Up to 3,000 minimum monthly wages, pursuant to the legislation, for individual residential construction |
| • Up to 2,500 minimum monthly wages, pursuant to the legislation, for refurbishment (reconstruction) of private residential houses as well as purchase of private houses or apartments in an apartment block |

Subsidized mortgage interest rates are set on the basis of the current refinancing rate of the Central Bank of Uzbekistan.

**Mortgage interest rates of Ipoteka Bank (July 2014)** (Percentage)

<table>
<thead>
<tr>
<th>Initial payment of a part of housing value</th>
<th>Yearly interest rate (loans for the period of 5-10 years)</th>
<th>Yearly interest rate (loans for the period of 3-5 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>19%</td>
<td>18%</td>
</tr>
<tr>
<td>30%</td>
<td>18%</td>
<td>17%</td>
</tr>
<tr>
<td>40%</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>50% and higher</td>
<td>16%</td>
<td>15%</td>
</tr>
</tbody>
</table>


According to the Uzbekistan Central Bank, 53,791 loans were provided for about UZS 2.1 trillion in 2003-2012. At the end of 2013, according to Moody’s, the mortgage portfolio was UZS 2,346 billion, or 83 per cent of population’s loan debt and 14 per cent of the banks’ total loan portfolio. It consisted only of loans issued in national currency.  

Banks also provide loans for reconstruction or extension of single-family houses. As a rule, these loans are secured against property, the same as housing mortgages; however, they have a shorter lending period than housing loans, of up to 10 years. The initial payment must be at least 25 per cent

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of the property value. The Uzbekistan Central Bank reports that in 2006-2012, banks issued about 2 thousand such loans for a total of UZS 57.58 billion.

Overdue and default mortgages are practically non-existent, and individual cases are determined outside the court system. Nevertheless, if the borrower defaults on a loan, the provider may claim against the value of the secured property, with priority over other creditors.

Enforced collection is executed if the debtor fails to meet his or her mortgage obligations. Notably, in case of failed, late or partial repayment more than three times during a 12-month period, the loan supplier is entitled to enforce collection. This may involve selling mortgaged property at public auction, with first claim on the money raised going to the mortgage provider. Thus, relevant legislation has been developed and mortgagees’ interests have been largely secured.

The country’s mortgage securities market remains underdeveloped, although there are preconditions for its creation. Presidential Resolution No. 726 of 7 November 2007 on Measures for Further Development of the Banking System and Engagement of Free Cash to Banking outlined the development of a draft Mortgage Securities Act and Securitization Act. Moreover, the Civil Code of the Republic of Uzbekistan provides the possibility for assignment of claim and securities issues.

The country has created the entire infrastructure vital to provide efficient mechanisms for securitization and emission transactions and securities issued for securitized assets. Development of the mortgage securities market remains constrained primarily by the lack of sufficient demand by institutional investors and low liquidity in the securities market.\(^\text{130}\)

**Microfinancing system**

In 2006 Uzbekistan adopted a Micro-lending Agencies Act, laying the foundation of a microfinancing sector. According to the Uzbekistan Central Bank, the county has 25 micro-lending agencies. The primary purpose of micro-loans is to ensure access to finance for households that cannot access loans in the market environment.

Micro-lending for private subsidiary farms’ business activities is the most popular type of lending in Uzbekistan. Such loans average 100 minimum monthly wages, with a minimum loan amount of UZS 100 thousand, at 3 per cent yearly interest rate for 18 months. There exists a grace period of up to 6 months during which borrowers do not have to repay the principal amount of the loan. This loan is provided only if it is secured against vehicles, real property, third-party guarantees or other assets. If an entrepreneur already has a good credit history, the lending terms will be more attractive next time, when the loan can be up to 500 minimum monthly wages, for up to 3 years, and at an interest rate of 0.5 of the Uzbekistan Central Bank refinancing rate (5 per cent).

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\(^{130}\) According to Moody’s, the aggregate amount of securities of non-Government Uzbek issuers in circulation at the local market was 0.3 percent of GDP at the end of 2013 (see Moody’s Investor Service, *Uzbekistan banking system outlook*, 15 April 2014). Meanwhile, according to S&P, the securities market capitalization does not exceed 10 percent of GDP (see S&P, *Banking Industry Country Risk Assessment: Uzbekistan*, 23 December 2014).
RECOMMENDATIONS

1. Develop a long-term housing sector development strategy

Uzbekistan has adapted most of its laws and regulations since the transition from Soviet rule and is implementing many targeted national housing programmes. However, to ensure long-term sustainable development, it is vital to prioritize housing policies and develop a long-term housing development strategy. This will promote guidelines and targets for continued development of the housing and utilities sectors in conjunction with the long-term socio-economic development of the republic and its regions, population settlement patterns, sectoral and regional schemes of placement of productive forces, and other factors. It also will systematize all current and planned national programmes, initiatives and reforms, notably in cost of implementation.

This housing sector development strategy should serve as the basis for comprehensive legal harmonization and development, as well as for spatial planning, land management and urban development at all levels. It should include issues related to population growth and efficient urbanization of the country, such as:

- Housing construction, notably social housing development, to meet the needs of households with different incomes and tenure preferences
- Continued implementation of the programme of construction of individual housing based on standard projects in rural areas, with the construction of social and market infrastructure in new rural residential areas
- Ensuring energy efficiency of new construction, by including mandatory standards in construction rules and regulations and ensuring energy-efficient reconstruction of existing housing stock
- Ensuring citizens' access to public services
- Providing targeted finance for the housing and utilities sectors, through the active involvement of the banking system in lending to the construction sector and attraction of funds of the population
- Providing support to low-income households for payment of utility bills (targeted allowances).

This strategy should define central and local authorities’ powers in implementing specific housing programmes, as well as enhance the implementation role of local authorities. Strategy development should make full use of UNECE guidelines and recommendations for real estate sector development: Policy Framework for Sustainable Real Estate Markets (2010)\(^{131}\) and Guidelines on Social Housing: Principles and Examples (2006)\(^{132}\).

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2. Ensure clearer delineation of housing authority

Currently, various agencies carry out the work on the development and implementation of housing policy in Uzbekistan. Legislation needs to be harmonized to clearly define the authority of relevant Ministries and departments while strengthening inter-agency cooperation on implementing of State housing policies. In particular, this will need to expand and clarify the powers of the State Committee for Architecture and Construction (Goskomarkhitektstroy) in the area of housing policy, as well as the Agency "Uzkommunkhizmat", which will improve the coordination of all participants in the implementation of the Government's housing policy, as well as in development and implementation of Government programmes to improve energy efficiency of the housing sector.

3. Decentralize, engage various stakeholders and promote active participation of the people

While expanding the authority of individual Government agencies in terms of conducting housing policy and coordinating its implementation, the possibility of engaging regional and district administrations will need to be taken into account, particularly in the formation of local housing policy within the framework of long-term development of the housing sector.

Local authorities should be able to adopt housing development programmes to satisfy existing and future housing demand. These should include programmes to develop land and infrastructure for individual developers, as well as creation of a monitoring system to control this individual development.

The current delineation of powers between authorities and implementing agencies complicates procedures of cooperation between departments engaged in spatial planning or infrastructure projects. Therefore, it is necessary to legally formalize cross-sectorial coordination. This coordination should include experts from relevant departments and agencies, physically present at the collaborative development of spatial planning regulations. For large projects, it will be necessary to establish multi-dimensional commissions to improve the decision making process. At all levels, a need exists to improve cooperation between the structures involved in territorial development.

Local budgets will need to be less dependent on public funds, if local authorities are to be financially capable of implementing housing policies that meet their constituents’ needs. In line with Government plans, inter-budget relations will need to be optimized to increase local authority incomes and reduce dependence on Government grants.

Enhancing local governance will promote the involvement of various stakeholders in the discussion and decision-making process. This also will intensify the people’s role, vital to policymaking, which should primarily be based on the needs of citizens. It is recommended that public participation in urban and spatial planning be strengthened according to the principles of the 1998 Aarhus Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters, which Uzbekistan is considering ratifying.

The general public in Uzbekistan remains uninvolved in the development of programmes generally, including action plans and housing programmes. Yet engaging people in urban development will lead to better urban programmes, better quality services and an improved environment, as well as a sense of participation in national and local policies. Urban areas work better if citizens are active and

involved in their design and management, rather than being viewed as passive consumers. Existing planning procedures should ensure that participation is meaningful.

Uzbekistan may benefit from considering new legislation formalizing public participation in development and implementation of national and local policies, programmes and plans. This could be based upon European Directive 2003/35/EC\textsuperscript{134} on public participation in development of plans and programmes related to environment and Directive 2001/42/EC\textsuperscript{135} on the environmental impact of certain plans and programmes.

4. Collect and provide solid and comprehensive data to support decision-making processes in housing, construction and land management sectors

A need exists to strengthen the system of statistical indicators for analysis of the housing and utilities sectors, as well to inform essential housing, construction and land policymaking at national and local levels. Development of targeted housing programmes is not currently based on reliable and comprehensive statistics that reflect housing demand among citizens.

Therefore, the current set of indicators requires revision. In addition, new indicators are needed to characterize housing sector status; these will provide the basis for problem identification, development of essential measures, and further monitoring. These indicators should primarily reflect housing conditions and needs, including those for social and affordable housing, as well as market response to housing demand. Moreover, the indicators should be developed which support the monitoring of the Global Goals for Sustainable Development (SDGs) adopted in 2015 by the UN General Assembly.

A list of sustainable urban development indicators is especially required to monitor development in Tashkent and other major cities in Uzbekistan. This will ensure more accurate assessment of sustainable development progress and, if necessary, lead to adjustment of urban development policy.

It also would be useful to follow a wider range of urban indicators, including density of the built environment. For example, a private construction practice of building several houses on six-acre (rural areas) and four-acre (urban areas) plots exists. It is essential to monitor this process and update development density and infrastructure indicators.

Considering that a regular census of population and housing and reliable cadastral data are in practice the basis for high-quality and up-to-date statistics of the housing sector, it will be necessary to mobilize the implementation of these measures.

5. Develop multi-family housing stock management

Uzbekistan already has legislation that regulates the management of multi-family housing stock. However, this legal framework focuses on private homeowners associations (PHOAs) and needs further development in the other methods of community apartment block management stipulated in the Housing Code.

Even so, PHOAs remain the prevailing type of multi-family housing management in Uzbekistan. For their further development, the following are recommended:

PHOAs within multi-family housing blocks should continue to be supported by State programmes and trainings. This ensures active participation of homeowners in making mutual decisions on multi-family housing management and maintenance, authority over the execution of decisions, and efficiency in spending homeowner funds. The predominance of these associations is vital to develop professional services markets for multi-family housing management and subcontracted maintenance.

Support for non-profit organizations, such as city and regional PHOAs, should be maintained/provided to carry out awareness raising and management training events for homeowners associations (HOAs). These should focus particularly on the advantages of creating HOAs, effective management and maintenance of apartment blocks, and improvement of housing energy efficiency. Trainings could focus on topics of importance to homeowners such as calculation of housing maintenance costs; competitive selection of a managing agency and how to negotiate an agreement with one; ways to finance energy efficiency, and others. Training of HOAs could be carried out in collaboration with international agencies.

Support identification and exchange of best practice for PHOAs, including engaging professional managers in multi-family housing management, energy retrofitting and other efforts.

Uzbekistan already has significant experience in supporting the creation of private managing and servicing agencies, as well as in the promotion of competition. To improve the quality of multi-family housing management by professional managers or managing agencies, it is recommended that:

- A national capacity training programme for apartment complex managers and service providers is initiated
- Professional standards for apartment block management and maintenance, based on international experience, are developed.

6. Improve access to housing and public services and enhance their quality

Demographic changes and growing urbanization require revisions to the planning and distribution of public facilities, as well as promotion of sustainable resource consumption. It is essential to develop a national programme to raise citizens’ awareness of efficient use of water and other resources, thereby reducing losses caused by improper use or faulty equipment.

- National reforms in the water supply and sewerage sector will need to include development of a long-term plan, based upon actual urbanization trends. Limited access to water resources requires new water management policies, investment in water pipeline capacity improvements, and upgrading of a water supply system that has been in use for more than 40 years. A water resources management policy will need to be developed alongside a territorial national plan, indicating essential vectors of development. To this end, a national task force should be created, consisting of a wide range of representatives of national and local authorities, private sector bodies and experts. Improvement in water management also will need to include commercialization of water rates, which will ensure efficiency of the sector and promote quality.

- In the energy sector, it is necessary to finish the transition to instrumental energy metering and use measures that promote energy saving. Priorities should include the constant, gradual raising of electricity rates, while considering the income level of the population;
improvements in energy efficiency; installation of energy-efficient equipment; and increased consumer awareness.

- In the heat-supply sector, initiatives to improve housing sector energy efficiency, notably through alternative sources of energy (solar and wind energy, biogas and others) should continue and be expanded. Special attention will need to be given to establishing financial preferences for private households. A national programme should be started to support citizens’ use of renewable energy (primarily solar) by, for example, providing subsidies for solar panel and battery purchase.

- Successful initiatives introducing thermal energy metering in the housing sector should continue and intensify. Equipping the housing stock with communal heat metering instruments will make people accountable for their actual consumption and improve the financial resilience of heat providers. Actual heat consumption data will encourage energy-saving measures in housing.

- Citizens with low income should be protected by subsidies from the planned increase in utility rates. To this end, there will need to establish a programme for targeted assistance with utility payments and funds targeted from the national budget.

7. **Ensure conditions that satisfy the housing needs of people with different incomes and preferences with regard to homeownership and tenure, particularly in rural areas**

Housing policy in Uzbekistan remains primarily focused upon the development of people-owned housing. However, the focus has been on persons with average and high incomes who can purchase or construct housing using their own assets, plus mortgages.

Tenure types for residential housing will need to be expanded, notably in rural areas. This can be done by creating, with Government support, a rented social housing sector. This would provide housing to groups who may not be eligible for support under the existing provision, including low-income households, single-parent families and elderly people. This housing could be provided under lease agreement with no right to privatization, within both non-profit and for-profit rented housing sectors.

Housing provided under social rent agreement, or non-commercial rent, may be owned by the State or local authorities. Alternatively, specialized non-profit organizations, similar to housing associations in Denmark or housing cooperatives in Finland, also can provide management and maintenance of this residential property. Activities of non-profit organizations that lease out housing stock will need to be regulated and supported by the Government.

8. **Diversify the State Programme on Construction of Model Detached Housing in Rural Areas**

The national programme of single-family residential standard housing development housed citizens with middle and below-middle incomes starting from 2009 and laid the foundation of the rural residential development that meets modern living standards. In fact, Uzbekistan has created a national model of urbanization of rural settlements, with implementation of this programme addressing several vital national tasks, notably, the reduction of urbanization rates. It also provided rural households with opportunities to run their own businesses, promoting rural employment and income growth. Given the positive effect of the rural housing development programme, its continued implementation is strongly recommended. At the same time, the programme does not satisfy the housing need of citizens who do not qualify for preferential mortgages.
While remarkable total financial efforts made to quickly provide the rural population with new houses, the programme in order to reduce costs uses a limited number of designs. The result is standard-looking rows of buildings of similar type and colour, which do not reflect the diversity of the Uzbekistan landscape or local cultural and construction traditions. Use of simplified cost-saving standard projects also fails to capitalize on the energy-efficiency potential of the new housing.

The next stage of the programme should diversify:

- Potential participants
- Housing tenures
- Variety of architectural solutions

It will need to address a wider range of issues related to implementation, and ensure maximum social, economic and environmental impact. The following changes to the State Programme on Construction of Model Detached Housing in Rural Areas are recommended:

- When planning new residential communities, construct detached houses or houses with apartments exclusively for social renting to satisfy the housing needs of lower-income citizens not eligible for preferential mortgages. This could be done via grants from international financing institutions to fund, for example, municipal housing stock owned by local authorities.

- More extensively use the wide range of standard projects that have already been developed by the Design Institute Qishlok Qurilish Loyiha Ltd., or individual expert-approved projects (notably with high energy-efficiency capacity), to ensure a more diverse and distinctive architectural appearance for new residential blocks.

- To ensure social diversity in new rural residential blocks, provide land plots to private developers with above-average incomes, on the condition that they construct houses at their own cost or use market mortgages. Energy-efficiency requirements should be set for these private developers, as well as other requirements.

- Coordinate the choice of new settlement locations with the revision of master plans or by setting up regional planning frameworks.

Within the programme, it is possible to test a new institutional and financial scheme for providing affordable rented housing. This can include communal and private housing stock, as well as low-rise buildings with few apartments. It also can include housing with periodic lease agreements (without right to privatization) for such groups as skilled professionals on fixed-term contracts temporarily living in rural areas, young families constructing their own housing, and others.

It will be beneficial to engage local communities in discussions on new residential block locations, planning and architectural characteristics. Coordinating the selection of new residential blocks, with amendments to the general layout of existing settlements, also is recommended.

9. Take into account environmental challenges related to urban development, as well as promote resilience of cities and rural human settlement to climate change

Urban areas in Uzbekistan, as in the rest of the world, are facing the serious challenges of climate change. Therefore, it is vital for cities to be resilient to the effects of global warming. This can be achieved through a range of climate change mitigation and adaptation measures that will need to be included in master plans.
Green urban infrastructure must be supported to create a sustainable city: for example, local vegetation, rather than water-demanding imported plants, should be used, thereby preventing excessive water consumption. Waterproof surfaces within the city can be balanced with permeable ones, since permeable surfaces mitigate extremes in temperature. Cities should view tree planting as an environmental service, providing shade during the hot season and protecting buildings during the cold season. Peripheral greenbelts will be vital for maintaining urban resilience to climate change. Green urban infrastructure planning also may be integrated in territorial development planning to prevent risks related to heat and floods.

Urban development plans, especially those for older cities, also will need to include upgrades of existing urban areas to new sustainable residential zones, thus increasing infrastructure efficiency and preserving undeveloped land outside the city. In reconstructed urban areas, the focus should be on sustainable land management through denser development and modernization of buildings. This can be extended to improvement of water supply, sewerage and heating systems, to save resources. Plans for restoration of existing housing stock should be integrated with improved public spaces and other facilities.

For rural settlement projects, more attention will need to be paid to climate change resilience, making use of local climate characteristics. New development should meet climate requirements such as orientation to the sun, accommodating the prevailing wind direction, avoiding waterproof surfaces, creating green infrastructure and so on.

10. Include comprehensive infrastructure development and its cost calculations in territorial development plans and land management at all levels

Housing construction decisions and provision of infrastructure are currently taken at different levels using different financing facilities. This eliminates the possibility of comprehensive project optimization at the pre-design (feasibility study) and design stages. However, comprehensive design of settlements and their infrastructure is essential.

For example, comprehensive infrastructure projects connecting housing settlements can continue the success of one of the most significant Government programmes, territorial plans for rural settlements.

During privately financed construction, actual costs of connecting to engineering infrastructure, as well as costs of social infrastructure, should be monitored by the Government. If local authorities make individual engineering and social infrastructure agreements with investors, a trans-regional database should be established to track Government costs and expenses. Emergency response infrastructure will need to receive special attention.

11. Improve urban planning in Tashkent

Tashkent is a fast-growing, modern city and has a high level of urban development. To provide more consistently compact and habitable urban development, special attention will need to be paid to limiting the amount of individual housing, improving walking accessibility, creating green spaces and providing public transportation infrastructure. Specific recommendations are:

- Limiting individual housing

  The lack of territory and need for urban housing development require limits on the amount of individual housing. Blocks of two- or three-storey houses should be built instead. This will lead to higher-density housing, sustainable and efficient use of land, and wider application of resource-efficient technologies.
• Walking accessibility and compactness of the urban environment as a focus of urban development strategy

Large spaces – even green spaces – require the use of public transport or personal vehicles to move between city locations. Walking accessibility should be improved, with especial consideration for accessibility for persons with disabilities. Transport strategy will need to be further developed and, if streets become narrower, the currently successful public transport system will need to be extended and improved.

• Green space strategy

While preserving the standard proportion of green spaces, their spatial arrangement in urban land management should be reviewed. Green spaces should be multi-functional: accessible to citizens, protection from noise, purification of air, and help in lowering extremely high temperatures. They should be located close to housing and create interconnected green corridors, following modern trends in the most advanced cities. Planning more compact streets and concentrating green areas, while maintaining their share of the total land area, strikes a reasonable compromise between compactness and green landscapes.

• Public transport infrastructure

The investment priority for the Tashkent transportation infrastructure will need to involve completion of the designed underground lines. Putting these into operation will complete the transport infrastructure, raising the efficiency of connection hubs.

12. Review land and property rights laws in order to reconcile discrepancies, and prepare for further modernization of land and real property laws

The Government is advised to consider legal changes that permit new forms of land tenure and greater protection for land rights. Current legislation provides private property rights to land only in a limited range of cases. Otherwise, rights to land and to buildings situated on that land are different. These differences hinder full-scale development of the land market.

Issues of land management and certification of land rights are regulated by numerous laws and Acts, leading to excessive and sometimes non-consistent regulation. The attempt to encourage investor confidence by providing a secure legal framework thus is undermined by over-legislation and regulation.

Legal frameworks are needed that will be recognized and trusted by land users and investors, providing a solid basis for economic reforms. Therefore, all current land and property laws require review to reconcile discrepancies. Particular attention will need to be paid to the Civil and Land Codes concerning registration of property and property rights.

Following this, preparations should be made for further gradual modernization of land and property laws. These should aim to:

• Provide rights to land ownership to citizens of Uzbekistan. Having established the legal principle of private land ownership by foreign nationals, the legislative framework should be extended so the privilege of land ownership likewise can be extended to Uzbekistan citizens.

• Unify the types of rights to land and buildings/structures (by reducing the number of types) in order to create conditions for the operation of the market of real property and the rights to it. For example, only three kinds of rights may be left in the law: ownership (State, legal entities
and individuals), use (State organizations and institutions), and lease (legal entities and individuals).

- Create a proper land administration system, using the UNECE Land Administration Guidelines with Special Reference to Countries in Transition (1996)\(^{136}\).

13. Create a unified cadastre and real estate rights database, along with comprehensive cadastral registration of land

Currently, four separate registers exist in Uzbekistan: for land, for residential buildings, for non-residential buildings, and for mortgages managed by Goskomzemgeodezkadastr.

However, land markets function best when processes and information are transparent, building confidence among investors and owner-occupiers. Having four separate registers thus is a disincentive to anyone wishing to borrow or lend money using land as collateral in a full-fledged functioning land market.

Taking into consideration the large-scale implementation of modern information technologies in Uzbekistan, a unified, integrated registration and cadastre database will need to be created. It should be administered by the Goskomzemgeodezkadastr, both at central and local levels. Clustering cadastre management functions for all types of land, real estate and registration of rights in a single agency, following a one-stop-shop principle, would be invaluable for the real estate market.

Lastly, the Government should seek to ensure comprehensive cadastral registration of land. It will need to regularly analyze progress of this regard and hasten it wherever possible.

14. Build the capacity of the State Committee of the Republic of Uzbekistan on Land Resources, Geodesy, Cartography and State Cadastre (Goskomzemgeodezkadastr)

As the land market matures and more property is registered, the relevance of Goskomzemgeodezkadastr to society will change. Preparing for this by adopting business disciplines will prove a good investment for the future. For example, publishing business plans and performance targets, as well as strengthening governance arrangements, will help to create a culture of openness and transparency. In turn, this will help to encourage inward investment through a fully-functioning land market. A successful and well-governed cadastre agency represents an essential element in an efficient, cost-effective and transparent land management system.

In view of existing and future needs in cadastre agency services, building the capacity of Goskomzemgeodezkadastr will need to include strengthening of:

- Human resources and organizational capacity, providing employees with the necessary skills and knowledge for successful future agency operations. The size of the agency will also need to be decided, as well as the location of its offices, to provide a properly located and equipped modern workplace.

- IT capacity, providing more automated processes and more comprehensive unified cadastral registration. It also will be necessary to examine capacity and architecture of cadastral databases

• Financial possibilities, providing a positive cost/income ratio, funding future IT infrastructure upgrades, or introducing new services

• Business strategy, including development plans for the agency, its vision and mission, and the required management structure for their support

• Cadastral data, including a comprehensive analysis – what kind of information is necessary, and for whom.

15. Ensure sustainable inflow of long-term investments for the housing sector

The Government will need to provide incentives to local businesses involved in large-scale projects in the housing and utilities sectors. Foreign investment should be attracted not only to new housing development, but also to reconstruction and maintenance of existing housing stock, as well as to improvement of depleted public services.

Loan facilities will need to be developed for energy-efficient maintenance and retrofitting of apartment blocks and individual dwellings, particularly for low-income households. A condition for loan provision should be the enhancement of housing energy efficiency; thus, the loan would be partially repaid through utility cost savings. Conditions for this already have been created through international cooperation on improving energy efficiency of public and residential buildings.

Development of a mortgage lending system should make full use of the housing construction financing guidelines set in the UNECE Housing Finance Schemes for Countries in Transition: Principles and Examples (2005).\textsuperscript{137}

It is also necessary to support the development of the microfinance sector, ensuring access to loans to improve housing conditions such as refurbishment, energy retrofitting and individual housing construction. This may be the only source of finance for low-income households or for households with high portion of non-monetary income from selling home-produced agricultural products. The primary role of the Government in developing this sector should be to establish simple, clear regulations, taking into consideration the specific nature of microfinancing and enabling microfinance agencies to use State funding.

To increase demand for housing mortgages, energy retrofitting loans and microloans, a need exists to enhance the financial awareness of loan users. This will foster the proper attitude to loaned assets and adequate assessment of payment capacities. At the same time, the expertise of loan agency staff, particularly mortgage loan inspectors, also will benefit from strengthening. This will promote better stability of the banking system across the board.

### Annex I. Key macro-economic indicators

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<tr>
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<tbody>
<tr>
<td>GDP (billions of USD)</td>
<td>13.7</td>
<td>14.3</td>
<td>17.3</td>
<td>22.3</td>
<td>29.5</td>
<td>33.7</td>
<td>39.3</td>
<td>45.9</td>
<td>51.8</td>
<td>57.2</td>
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<tr>
<td>GDP growth, percentage</td>
<td>3.8</td>
<td>7.0</td>
<td>7.5</td>
<td>9.5</td>
<td>9.0</td>
<td>8.1</td>
<td>8.5</td>
<td>8.3</td>
<td>8.2</td>
<td>8.0</td>
<td>2.6 times</td>
</tr>
<tr>
<td>Per capita GDP growth rate, percentage</td>
<td>2.4</td>
<td>5.7</td>
<td>6.1</td>
<td>7.9</td>
<td>7.3</td>
<td>6.3</td>
<td>5.4</td>
<td>5.4</td>
<td>6.6</td>
<td>6.3</td>
<td>2.1 times</td>
</tr>
<tr>
<td>Foreign trade balance as percentage of GDP</td>
<td>2.3</td>
<td>9.2</td>
<td>9.3</td>
<td>10.1</td>
<td>6.1</td>
<td>6.9</td>
<td>9.8</td>
<td>8.0</td>
<td>15.0</td>
<td>2.2</td>
<td>-</td>
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<tr>
<td>(payment in US dollars)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Exports growth rate, percentage</td>
<td>0.9</td>
<td>11.5</td>
<td>18.1</td>
<td>40.7</td>
<td>27.8</td>
<td>2.4</td>
<td>10.6</td>
<td>15.3</td>
<td>-9.5</td>
<td>5.3</td>
<td>4.4 times</td>
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<tr>
<td>Labour productivity growth rate, percentage</td>
<td>2.7</td>
<td>2.1</td>
<td>6.4</td>
<td>6.7</td>
<td>6.1</td>
<td>5.3</td>
<td>5.6</td>
<td>4.7</td>
<td>6.2</td>
<td>6.3</td>
<td>2 times</td>
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<tr>
<td>Growth rate of value added in agriculture,</td>
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<td>5.9</td>
<td>7.1</td>
<td>6.5</td>
<td>4.7</td>
<td>5.8</td>
<td>6.6</td>
<td>6.8</td>
<td>7.1</td>
<td>6.8</td>
<td>2.3 times</td>
</tr>
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<td>percentage</td>
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<tr>
<td>Growth rate of value added in industry,</td>
<td>13.0</td>
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<td>6.2</td>
<td>6.6</td>
<td>6.8</td>
<td>4.1</td>
<td>4.2</td>
<td>3.5</td>
<td>4.6</td>
<td>6.0</td>
<td>1.8 times</td>
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<td>percentage</td>
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<tr>
<td>Investments, percentage of GDP</td>
<td>22.9</td>
<td>19.9</td>
<td>19.1</td>
<td>20.9</td>
<td>24.5</td>
<td>25.4</td>
<td>24.6</td>
<td>22.8</td>
<td>23.3</td>
<td>24.1</td>
<td>-</td>
</tr>
<tr>
<td>Foreign direct investments,% of GDP</td>
<td>0.8</td>
<td>3.0</td>
<td>2.6</td>
<td>4.3</td>
<td>6.1</td>
<td>7.1</td>
<td>6.1</td>
<td>4.1</td>
<td>3.7</td>
<td>3.6</td>
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*Source: State Committee on Statistics.*
### Annex II. Administrative-territorial formations of the Republic of Uzbekistan (2012)

<table>
<thead>
<tr>
<th></th>
<th>Land area, hectares</th>
<th>Number of districts</th>
<th>Number of rural districts</th>
<th>Number of cities</th>
<th>Number of urban-type settlements</th>
<th>Number of rural citizens gathering areas</th>
<th>Number of rural settlements</th>
<th>Number of makhalla communities</th>
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<tbody>
<tr>
<td>Republic of Uzbekistan</td>
<td>44,896,879</td>
<td>168</td>
<td>157</td>
<td>118</td>
<td>27</td>
<td>91</td>
<td>1,085</td>
<td>1,471</td>
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<td>Republic of Karakalpakstan</td>
<td>16,659,095</td>
<td>14</td>
<td>14</td>
<td>12</td>
<td>2</td>
<td>10</td>
<td>26</td>
<td>139</td>
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<tr>
<td>Provinces:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Andijan</td>
<td>430,248</td>
<td>14</td>
<td>14</td>
<td>11</td>
<td>2</td>
<td>9</td>
<td>78</td>
<td>95</td>
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<tr>
<td>Bukhara</td>
<td>4,032,286</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>2</td>
<td>9</td>
<td>69</td>
<td>121</td>
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<tr>
<td>Djizakh</td>
<td>2,121,064</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>1</td>
<td>5</td>
<td>42</td>
<td>100</td>
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<td>Kashkadarya</td>
<td>2,856,799</td>
<td>13</td>
<td>13</td>
<td>12</td>
<td>1</td>
<td>11</td>
<td>123</td>
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<td>Navoi</td>
<td>11,098,854</td>
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<td>6</td>
<td>2</td>
<td>4</td>
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<td>Namangan</td>
<td>743,944</td>
<td>11</td>
<td>11</td>
<td>8</td>
<td>1</td>
<td>7</td>
<td>120</td>
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<td>Samarkand</td>
<td>1,677,302</td>
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<td>14</td>
<td>11</td>
<td>2</td>
<td>9</td>
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<td>Surkhandarya</td>
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<td>8</td>
<td>1</td>
<td>7</td>
<td>114</td>
<td>114</td>
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<td>Syrdarya</td>
<td>427,618</td>
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<td>8</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>25</td>
<td>71</td>
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<tr>
<td>Tashkent</td>
<td>1,525,294</td>
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<td>14</td>
<td>15</td>
<td>4</td>
<td>11</td>
<td>97</td>
<td>146</td>
</tr>
<tr>
<td>Fergana</td>
<td>675,900</td>
<td>15</td>
<td>15</td>
<td>9</td>
<td>4</td>
<td>5</td>
<td>197</td>
<td>161</td>
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<td>Khorezm</td>
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<td>10</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>58</td>
<td>98</td>
</tr>
<tr>
<td>Tashkent city</td>
<td>33,378</td>
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<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
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</tbody>
</table>

**Source:** State Committee on Statistics.
Annex III. Permit procedures in the construction sector

Scheme of licensing procedures for allocating land for construction, examination of project documentation, and obtaining building permit (in accordance with the decision of the Cabinet of the Republic of Uzbekistan from 25.02.2013, No. 54)

<table>
<thead>
<tr>
<th>Khokim of district (city)</th>
<th>Legal and physical persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitting application to the Division (Department) on architecture and construction - 2 days</td>
<td>Making decision on allocation of land plot - 2 days</td>
</tr>
<tr>
<td>^</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Submitting application on land plot assignment</td>
<td>Receive Khokim's decision on land plot acquisition, architecture and planning assignment and land acquisition certificate</td>
</tr>
</tbody>
</table>

Division (Department) on Architecture and Construction of the district (city)

1. Elaborating and considering materials on selection of land plot - 19 days
2. Elaborating and considering materials on acquisition of land plot - 10 days
3. Land line siting, obtaining the land acquisition certificate and technical specifications, and elaborating the architecture and planning assignment (Parts I and II) - 14 days

1.1. Stakeholder Organizations
- Consideration of land plot allocation plan - 3 days

1.2. Main Department on Architecture and Construction
- Considering materials on selection of land plot - 4 days

1.3. Central design and survey organizations
- Considering materials on selection of land plot - 7 days

2.1. Stakeholder Organizations
- Issuance of conclusions on selected plot of land - 5 days

2.2. Commission on consideration of land plots provision (selling) issues under the Khokim of district (city)
- Considering materials on selection of land plot - 3 days

2.2. Commission on consideration of land plots provision (selling) issues under the Khokim of district (city)
- Considering materials on selection of land plot - 3 days

3.1. Self-supporting service for Land Planning and Cadastral Register
- Registration of right of legal and physical persons on land plots and submission of certificate to the Division (Department) on Architecture and Construction - 2 days

3.2. Territorial operating organizations
- Issuance of technical specifications on connecting to engineering and communication networks - 3 days

The total period of elaboration, consideration and approval of materials on issuance of land plots in the case of absence of urban development documentation - 47 days.
A public space in front of the local authority office
New model rural settlements between Tashkent and Samarkand

A plan of a rural settlement
Source: A. Fidanza, June 2014.
### Annex V. Cities of the Republic of Uzbekistan, by size and location in various landscape and climate regions

<table>
<thead>
<tr>
<th>Groups of cities, by size</th>
<th>Landscape and climate regions and their conditions for housing</th>
<th>New cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Largest (more than 1,000 people)</td>
<td>Favorable (oasis in the foothills)</td>
<td>Tashkent city</td>
</tr>
<tr>
<td></td>
<td>Limited (oasis in the desert, newly reclaimed lands)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unsatisfactory (deserts)</td>
<td></td>
</tr>
<tr>
<td>Large (more than 250 to 1,000 people)</td>
<td>Favorable (oasis in the foothills)</td>
<td>Andijan, Namangan city, Samarkand city, Fergana city</td>
</tr>
<tr>
<td></td>
<td>Limited (oasis in the desert, newly reclaimed lands)</td>
<td>Nukus, Karshi, Bukhara</td>
</tr>
<tr>
<td></td>
<td>Unsatisfactory (deserts)</td>
<td></td>
</tr>
<tr>
<td>Big (100 - 250 thousand people)</td>
<td>Favorable (oasis in the foothills)</td>
<td>Almalyk, Angren, Jizzakh, Kokand, Marghilan, Chirchik, Shakhrisabz</td>
</tr>
<tr>
<td></td>
<td>Limited (oasis in the desert, newly reclaimed lands)</td>
<td>Navoi, Termez, Urgench city</td>
</tr>
<tr>
<td></td>
<td>Unsatisfactory (deserts)</td>
<td></td>
</tr>
<tr>
<td>Average (50 - less than 100 thousand people)</td>
<td>Favorable (oasis in the foothills)</td>
<td>Asaka, Kasansay, Pape, Parkent, Syrdarya, Urgut, Uchkurgan, Hamza, Khanabad, Chinaz, Chust, Shahrikhan</td>
</tr>
<tr>
<td></td>
<td>Limited (oasis in the desert, newly reclaimed lands)</td>
<td>Beruniy, Friendship, Kagan, Kasan, Kungrad, Takhiatash Turtkul, Khiva, Khodjeyli, Shavat, Yangiye</td>
</tr>
<tr>
<td></td>
<td>Unsatisfactory (deserts)</td>
<td>Zarafshan, Mubarak</td>
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*Source: State Committee on Statistics.*
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State Unitary Enterprise Uzshaharsozlik LITI

Unitary enterprise “Toshissikkuvvati”.
