

# STRENGTHENING FUNCTIONAL URBAN REGIONS IN AZERBAIJAN

National Urban Assessment 2017

DECEMBER 2018



# STRENGTHENING FUNCTIONAL URBAN REGIONS IN AZERBAIJAN

National Urban Assessment 2017

DECEMBER 2018





#### Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO)

© 2018 Asian Development Bank 6 ADB Avenue, Mandaluyong City, 1550 Metro Manila, Philippines Tel +63 2 632 4444; Fax +63 2 636 2444 www.adb.org

Some rights reserved. Published in 2018.

ISBN 978-92-9261-378-5 (print), 978-92-9261-379-2 (electronic) Publication Stock No. TCS179176 DOI: http://dx.doi.org/10.22617/TCS179176

The views expressed in this publication are those of the authors and do not necessarily reflect the views and policies of the Asian Development Bank (ADB) or its Board of Governors or the governments they represent.

ADB does not guarantee the accuracy of the data included in this publication and accepts no responsibility for any consequence of their use. The mention of specific companies or products of manufacturers does not imply that they are endorsed or recommended by ADB in preference to others of a similar nature that are not mentioned.

By making any designation of or reference to a particular territory or geographic area, or by using the term "country" in this document, ADB does not intend to make any judgments as to the legal or other status of any territory or area.

This work is available under the Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO) https://creativecommons.org/licenses/by/3.0/igo/. By using the content of this publication, you agree to be bound by the terms of this license. For attribution, translations, adaptations, and permissions, please read the provisions and terms of use at https://www.adb.org/terms-use#openaccess.

This CC license does not apply to non-ADB copyright materials in this publication. If the material is attributed to another source, please contact the copyright owner or publisher of that source for permission to reproduce it. ADB cannot be held liable for any claims that arise as a result of your use of the material.

Please contact pubsmarketing@adb.org if you have questions or comments with respect to content, or if you wish to obtain copyright permission for your intended use that does not fall within these terms, or for permission to use the ADB logo.

#### Notes:

In this publication, "\$" refers to United States dollars.

On the cover: ADB's support for urban development has helped improve road conditions in Azerbaijan (photos by ADB). Corrigenda to ADB publications may be found at http://www.adb.org/publications/corrigenda.

# Contents

Tal	bles, F	igures, Boxes, and Maps	V
Ab	brevia	tions	vii
Ac	knowl	edgments	ix
Ex	ecutive	e Summary	xi
1	Intro	oduction	1
2	Country Profile		3
	2.1	Location: At the Crossroads of Asia and Europe	3
	2.2	Political History and System: Transition at the Crossroads	4
	2.3	Economy: Economic Diversification at the Crossroads	9
	2.4	Urbanization Profile	12
		2.4.1 Demographic Analysis	12
		2.4.2 Spatial Analysis	12
		2.4.3 Internally Displaced Persons	14
		2.4.4 Land Use, Land Management, and Land Use Planning	16
	2.5	Governance of Urban Development and Service Provision	18
		Urban Finance Matrix	19
		Enabling Environment for Urban Competitiveness	24
	2.8	Competitive Base: Economic Profile	27
		2.8.1. Macroeconomic Performance	27
		2.8.2 Sectoral Analysis	28
		2.8.3 Employment	29
		2.8.4 Spatial Distribution of Economic Activity	31
		2.8.5 Economic Diversification Prospects and Policies	35
	2.9	Inclusive Base: Equity Profile	36
		2.9.1 Inclusiveness of Economic Growth	37
		2.9.2 Poverty Status	37
		2.9.3 Gender Status and Policy	38
	2.10	Green Base: Environmental Profile	40
		2.10.1 Climate Change	40
		2.10.2 Greenhouse Gas Emissions	41
		2.10.3 Vulnerability	41

3	Urb	an Nee	eds Assessment	43
	3.1	3.1 Overview		
	3.2	Wate	r Supply and Sanitation	43
	3.3		Waste Management	45
	3.4	Trans		47
	3.5	Energ	•	49
	3.6	_	ommunications	50
	3.7	Hous		51
4	Urban Vision and Strategic Prioritization			
	4.1	Natio	onal Urban Strategies	53
		4.1.1	Azerbaijan 2020: A Look into the Future and the Strategic	
			Roadmap on the National Economy and Main Economic Sectors	53
		4.1.2	State Program on Poverty Reduction and Sustainable	
			Development for 2008–2015	55
		4.1.3	•	
			of Regions, 2014–2018	56
	4.2 Urban Vision and Strategy Priorities		<b>5</b> ,	59
			Urban and Regional Economic Development:	
			Past Achievements, Future Challenges	59
		4.2.2	The Urban Development Strategy Framework: A Three-Level Approach	
5	Policy and Programming			66
	5.1	ADB	Support in Urban Development	66
	5.2	Curre	ent Development Partner Focus	68
6	Rec	omme	nded Priority Interventions	69
	Refe	erence	s	71

# Tables, Figures, Boxes, and Maps

# **TABLES**

1	Internally Displaced Persons Concentration in Rayons, 2008	15
2	Gross Value Added of Output by Economic Activities, 2017 (AZN million)	29
3	Employment by Economic Activity Sectors, 2000–2014	30
4	Industrial and Agricultural Production by Economic Region, 2014	32
5	Employed and Unemployed by Gender, 2014	38
6	Recommended Priority Interventions	70
FIGI	URES	
1	National Urban Assessment Framework	1
2	Institutional Structure of Executive Governance	8
3	Total Urban and Rural Populations, 1994–2015 (million)	12
4	Urban Population Changes of Rayons and Cities (Excluding Baku),1995–2015	13
5	Level of Urbanization by Economic Region, 2015 (%)	14
6	Urban Finance Matrix	20
7	Budget Revenue Sources, 2015 and 2016 (AZN billion)	21
8	Azerbaijan Ranking Changes in World Bank's Doing Business Survey,	
	2010–2015	25
9	Azerbaijan's Ranking in 10 Doing Business Survey Topics	26
10	Doing Business Survey Ranking of Azerbaijan and Comparator Economies	27
11	Oil Production and Gross Domestic Product Growth Rates,	
	2003-2013 ('000 tons)	28
12	Average Monthly Wages and Salaries by Kinds of Economic Activity in 2013	31
13	Greenhouse Gas Emissions, 1990–2011 (metric tons)	41
14	State Program on Socioeconomic Development of Regions Projects by Region,	
	2014–2018	58
15	Urban Development Framework	61

# **BOXES**

1	The State Oil Fund of the Republic of Azerbaijan	10	
2	Azerbaijan 2020: A Look into the Future	11	
3	Azerbaijan 2020—A Synopsis of the Vision	54	
4	Azerbaijan 2020—Key Policy Measures	54	
5	State Program on Poverty Reduction and Sustainable		
	Development Strategic Goals	56	
6	Key National Urban Assessment Strategy Drivers	60	
MA	PS		
1	Azerbaijan at the Crossroads of Asia and Europe	3	
2	Largest Urban Population Centers, 2014	6	
3	Azerbaijan's Economic Regions	7	
4	Urban Centers with More Than 12,000 Employees, 2015	33	
5	Functional Urban Regions—Distribution of Existing and Potential		
	Economic Activity Drivers	34	
6	Functional Urban Regions—Economic Activity Drivers		
	of Potential Urban Clusters and Corridors	64	

# **Abbreviations**

ADB - Asian Development Bank

AZN – Azerbaijan manat

CIS – Commonwealth of Independent States

CPS - country partnership strategy

EBRD – European Bank for Reconstruction and Development

EU – European Union

DMC – developing member country

GDP - gross domestic product

ICT - information and communication technology

IDP - internally displaced persons

IFC - International Finance Corporation

IFI – international finance institution

km – kilometer

m – meter

m<sup>2</sup> – square meter

m³ – cubic meter

MDG - Millennium Development Goal

NAR - Nakhchivan Autonomous Republic

NUA - national urban assessment

PPP – public-private partnership

SCUPA - State Committee for Town Planning and Architecture

SOFAZ - State Oil Fund of the Republic of Azerbaijan

SPPRSD - State Program on Poverty Reduction and Sustainable Development

SPSDR - State Program on Socioeconomic Development of Regions

SWM – solid waste management

UN – United Nations

UOP - urban operational plan

# Acknowledgments

# Government of Azerbaijan

#### **Ministries**

**Adalet Aliyev**, deputy head, Infrastructure Finance Department, Ministry of Finance **Elchin Ahmedov**, deputy director, Ministry of Economy (Department for Cooperation with International Organizations)

Ismail Sadigov, head of department, Ministry of Education

Mahabbat Mammadov, deputy for preparation of state programs, Ministry of Energy

Ilgar Rahimov, deputy minister, Ministry of Labor and Social Protection

**Mutallim Abdulhasanov,** head of division, Ministry of Ecology and Natural Resources (Department of Ecology and Environmental Protection Policy)

**Rufat Taghizadeh,** deputy head, Department for International Cooperation, Ministry of Communications and Information Technologies

Aydin Ismiyev, head, Tourism Department, Ministry of Culture and Tourism

#### State Committees

**Dovletkhan Dovletkhanov,** deputy chair, State Committee on Urban Planning and Architecture

Rustam Shahbazov, deputy chair, State Committee on Property Issues

**Sadaget Gahramanova,** first deputy chair, State Committee on Family, Women and Children

**Farhad Aliyev,** deputy head, International Relations Department, State Statistical Committee

### **State-Owned Companies**

Rasul Najafzade, head/chief technologist, Azersu OJSC

Baba Rzayev, chairman of the board, Azerishig Open Joint Stock Company

Rafael Abbasov, head, Strategy and Investment Department, AzerEnerji OJSC

### **Local Executive Power**

Mardan Jamalov, head, Executive Power of Shirvan City

# Other Organizations

Larisa Leshchenko, country manager, Azerbaijan, World Bank
Rector Urkhan Alekberov, Academy of Public Administration
Ahmad Alili, researcher in economic policy, Center for Economic and Social Development

# Asian Development Bank

**Sean O' Sullivan,** director general (retired), Central and West Asia Department (CWRD), ADB **Hong Wei,** deputy director general (retired), CWRD, ADB

#### Advisors

**Ye Yong,** director, Urban Development and Water Division (CWUW), CWRD **Nariman Mannapbekov**, country director, Azerbaijan Resident Mission (AZRM), **Olly Norojono**, director, Transport, Energy, and Natural Resources Division, PARD (PATE); former country director, AZRM **Kathie M. Julian**, advisor (retired), CWRD

#### **Team Leaders**

**Sanjay Joshi,** principal urban development specialist, Urban Development and Water Division (SAUW), South Asia Department; former senior urban development specialist, CWUW

Ramola Naik Singru, senior urban development specialist, CWUW

#### Peer Reviewers

Lu Shen, principal urban development specialist, CWUW

**Sara Azfar,** senior planning and policy specialist, Strategy and Policy Department; former urban development specialist, CWUW

Faraj Huseynbeyov, senior project officer, AZRM

Yagutlltifat Ertenliche, project officer, AZRM

## **Consultant Authors**

**Nicholas Allen,** chief executive officer, GlobalWorks International Corporation **Colin Arnott,** consultant, GlobalWorks International Corporation

# Consultant Support

Data Analysis and Graphics: Kristen Saul, Waters Economics

Interpreter: Zulfiyya Safarli

# **Publication Coordination**

Michelle Tan, operations analyst, CWUW

Jenevieve Javier, senior operations assistant, CWUW

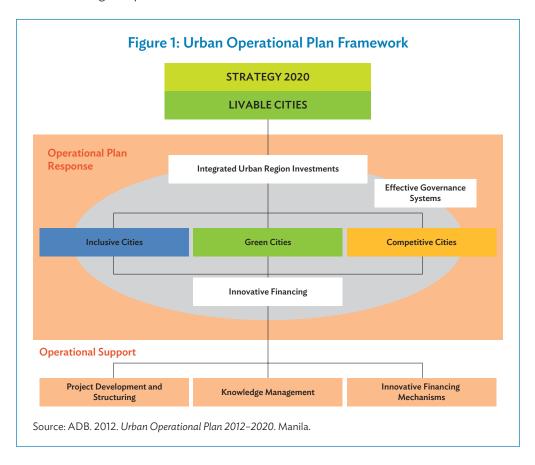
**Abraham "Abe" Villanueva,** logistics management assistant (Cartography), Institutional Services Division, Office of Administrative Services

Rodel Bautista, communications assistant, Department of Communications

# **Executive Summary**

# National Urban Assessment Process

The National Urban Assessment (NUA) for Azerbaijan is one of the first of a series of NUAs prepared by the Asian Development Bank (ADB) for selected ADB developing member countries (DMCs) under its Urban Operational Plan (UOP) 2012–2020. The UOP guides investment planning and financing across key urban infrastructure sectors to improve the performance of cities, with a 3E thematic focus covering *Economy, Equity,* and *Environment*. Figure 1 provides the UOP framework.



ADB. 2012. Urban Operational Plan 2012–2020. Manila.

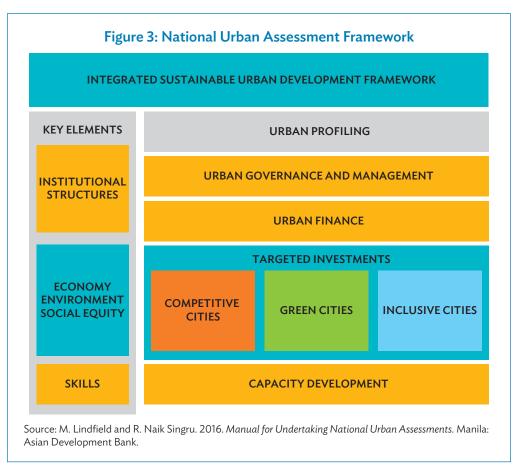
## Figure 2: The 3E Approach

- ✓ Competitive Cities approach: The contribution of economic clusters in a broader context, being fundamental to designing a value-added approach to inclusive economic development.
- ✓ Inclusive Cities approach: To support social equity objectives in urban housing, local infrastructure, community services, and livelihood development.
- ✓ **Green Cities approach:** With an emphasis on environmental mitigation, adaptation, and climate resilience measures to bolster the central role of cities in improving quality of life.

3E = Equity, Economy, and Environment.

Source: ADB. 2012. Urban Operational Plan 2012-2020. Manila.

An NUA is the first step in developing an integrated and sustainable urban development framework. It provides an urban management platform to integrate economic, equity, and environmental aspects within physical and spatial dimensions of urban development and the prioritization of strategic investments. The 3E approach of the UOP is thus captured through the NUA (Figure 2).



M. Lindfield and R. Naik Singru. 2016. *Manual for Undertaking National Urban Assessments*. Manila: Asian Development Bank.

This NUA presents a snapshot of the urban sector and urbanization processes currently at work in Azerbaijan. It then recommends ways to refine urban priorities, develop policy options and targeted investments, and enable urban action. This NUA is based on key thematic areas (Figure 3). It includes two development phases: (i) urban profiling and (ii) visioning, strategy formulation, and prioritization, including the formulation of an urban sector strategy based on strategic investment priorities for the country and urban regions, and a strategic urban infrastructure investment plan.<sup>3</sup>

# **Country Profile**

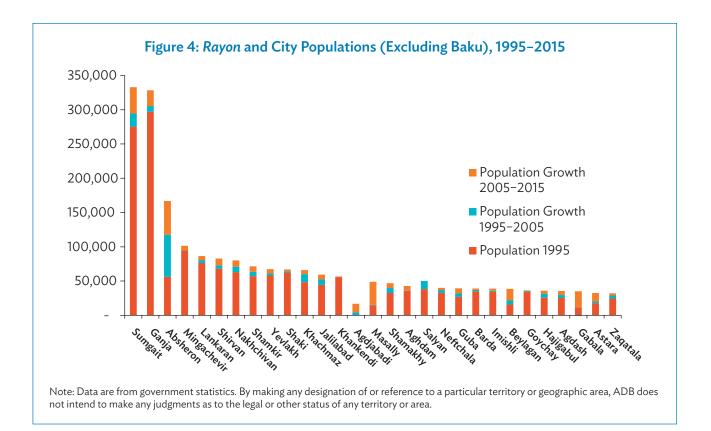
Overview. Azerbaijan is located in the southeastern part of the Caucasus region, extending westward from the Caspian Sea. It is uniquely positioned at the crossroads of Asia and Europe and is an important regional member of the Central Asia Regional Economic Cooperation. Its population is around 9.6 million (2015), with about 5 million (53%) recorded as urban. Of this, about 2.2 million are located in Baku, the capital city. Only two other cities, Sumqayit and Ganja, have large populations—in excess of 300,000—while others have 100,000 inhabitants or below. Azerbaijan has 10 economic regions (including the Nakhchivan Autonomous Region) that comprising 63 rayons (districts) and 11 saharis (larger towns and cities). Economic policies aim to transition from a heavy reliance on oil and gas production and toward a sustainable, diversified economy with a vibrant non-oil sector and balanced national development.

**Urbanization Profile.** Over the past 20 years, Azerbaijan has maintained a highly urbanized population rate, over which time the urban population increased by 27% and the rural population by 24%. Population distribution has also been impacted significantly by the displacement of over 500,000 Azerbaijanis during the early 1990s, many of whom migrated to the Baku region. Significant disparities now exist, however, in nationwide urbanization levels, ranging from Baku (92%) to the Ganja–Gazakh region (46%) to the largely rural border regions (20%–30%). This imbalance is also reflected in the distribution of cities and urban areas: outside of the over 2.5 million population of Baku, Sumagayit, and the Absheron region, only Ganja has a sizable population (328,400), with the rest of the cities and urban areas having populations of only about 30,000 to 100,000 inhabitants (Figure 4).

**Urban Development Governance and Service Provision.** In Azerbaijan, the state leads in service delivery. Ministries, state committees, and state-owned utility enterprises provide urban infrastructure including transport, water, sanitation, telecommunications, and energy. Urban services such as solid waste management (SWM) are however provided by local Executive Powers of *rayons* and cities that are appointed by the central government. A second parallel system of local governance exists, comprising of elected municipalities that are accountable directly to citizens and national Parliament. Most of these, however, lack the appropriate scale, finance, or capacity to carry out their designated urban service functions. While the role of the private sector is increasing in health care, education, and communications, it remains limited in urban infrastructure investment.

Including review of active political and economic systems, urbanization, governance and urban management, legislative and regulatory frameworks, the urban finance matrix, 3E's adoption, and international support initiatives.

The urban population taken as a proportion of total population.



The Urban Finance Matrix. The state has enjoyed a strong fiscal capacity, particularly during 2008–2015, from oil and gas revenues to the government and the State Oil Fund of the Republic of Azerbaijan (SOFAZ). This has supported urban funding through direct state budget allocations to ministries, state committees, and state-owned utility enterprises. SOFAZ also directly funds urban infrastructure development, and significant funding contributions have also been received from international finance institutions (IFIs). Conversely, local taxation and service charges make a negligible contribution. Steeply falling oil revenues since mid-2015, however, have threatened this level of state investment as the government's annual capital expenditure budget, which peaked at over AZN9 billion, is projected to fall.

**Competitive Base.** Annual gross domestic product (GDP) growth rates of 5%–10% from 2010 to 2014 declined sharply to 1% in 2015, following trends in oil production and prices. Non-oil sector growth is now higher than oil growth, and will benefit further from recent devaluations. The oil and gas sector now contributes less than 50% of GDP, employing less than 1% of the workforce. Although employment distribution is concentrated in Baku and the Absheron region, urban employment centers with greater than 15,000 employees do exist around Ganja in the west and Shirvan to Lankaran in the south. Based on the 2015 *Doing Business* index, Azerbaijan, ranked 63rd, is significantly higher than the median ranking of 95th out of 189 economies.

This includes construction, transport, telecoms, wholesale and retail trade, non-oil manufacturing, and agriculture.

**Inclusive Base.** Azerbaijan is a "high human development" country ranked 76th out of 187 countries in the 2014 Human Development Index. Inequality and poverty have declined significantly, the income difference between urban and rural areas is relatively small, and its social protection system is strong. Internally displaced persons (IDPs), however, suffer from a relatively high level of poverty, and lack access to employment and basic services. Azerbaijan is near gender parity in education and literacy but is less equal in terms of women's empowerment and public decision-making, pay, and entrepreneurship.

**Green Base.** Azerbaijan ranks 93rd out of 172 countries in natural disaster risk.<sup>7</sup> It is seismically active and highly vulnerable to climate-induced impacts.<sup>8</sup> Water distribution is uneven in Azerbaijan, and mountainous regions in particular endure frequent and intense flooding and mudflows during wet months and water shortages during dry months. Greenhouse gas emissions in Azerbaijan in 2012 were estimated at approximately 70 million metric tons of carbon dioxide equivalent, having steadily risen since 2001.

**Urban Needs Assessment.** This section summarizes the status of the nation's urban infrastructure sectors, identifying key investment needs over the short to medium term.

- Water Supply and Sanitation. Azersu JSC, a centralized joint-stock corporation, provides potable water supplies and wastewater services nationwide. Being a full-service utility, it designs, constructs, and maintains its own infrastructure, supplying potable water to over 1.3 million consumers. Although Azersu has rapidly expanded water supply networks, currently serving 99% of Baku and 83% of the nation's cities and towns, wastewater treatment provision lags substantially behind. Most wastewater is discharged without treatment. Institutionally, there is a need for further reform the corporate restructuring of Azersu to increase its professionalism, and improve its service efficiency and financial sustainability.
- Solid Waste Management. Outside Baku, most Executive Powers provide rudimentary urban solid waste management (SWM) collection services, with direct disposal in largely non-engineered dumpsites. SWM services in peri-urban and rural areas are, however, a responsibility of municipalities, although in reality, few municipalities have the capacity to provide SWM services to their populations. As a result, most waste is not even collected, and where collected, it is dumped at dumpsites to be burned, buried, or discarded. These practices can cause significant atmospheric, surface and groundwater pollution, and other environmental impacts, and threaten public safety. Waste minimization is largely an unknown concept and recycling is in its infancy stage. The government is responding through implementation of major SWM reforms including

<sup>6</sup> UNDP. 2014. Human Development Report 2014 Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience. New York. http://hdr.undp.org/sites/default/files/hdr14-report-en-1.pdf?

Being naturally prone to earthquakes, floods, droughts, and landslides.

Seismic hazards for Azerbaijan are classified as medium to high, with northern areas being classified as very high. Coastal areas, water resources, agriculture, energy, and ecosystems are highly vulnerable. Climate change impacts include temperature increases, river flow reductions and realignments, snowfall decreases, and receding snowlines, with more extreme weather events predicted to cause forest fires, flooding, landslides, and coastal erosion

<sup>9</sup> Azersu's wastewater services only cover 78% of Baku's population and 32% of other cities and towns.

- formulation of a national SWM strategy and revised legal, regulatory, and institutional frameworks that are integrated with major sector investments nationwide.<sup>10</sup>
- Transport. Azerbaijan's transport sector consists of roads, highways, rail, civil aviation, and shipping. Its road network includes a 500-kilometer (km) four-lane highway although much of the road network is in poor condition and deteriorating rapidly. The rail network annually transports about 4.8 million passengers and 22.3 million tons of freight, although its infrastructure and rolling stock have also deteriorated, with many track sections in poor condition. Azerbaijan has five international airports, the largest being Baku's Heydar Aliyev International Airport that catered to nearly 2.9 million passengers in 2013. The nation's primary maritime activity is the transport of cargo, oil, and oil products with the Russian Federation's inland waterways providing access to the open seas during warmer months. Key investments are needed to improve urban transport and mobility in selected cities through lower-cost improvements to urban transport systems. These investments are envisioned to include bus prioritization, improved bus terminals, pedestrian infrastructure, and traffic management.
- Energy. Following significant investments, electrical power generation now exceeds national demand, resulting in power being exported to Turkey, Georgia, and the Russian Federation. Paradoxically, scant investments in the nation's aging national electrical distribution grid have resulted in progressive declines in performance and increases in power outages that have particularly affected provincial areas. As a result of substantial distribution network losses, the government unbundled sector operations in early 2015, transferring the nation's electrical distribution segment to a new utility Azerishig Open Joint Stock Company (Azerishig). The government now plans to partner with IFIs to fund planned distribution system investments. Through support from the government and IFIs, progress is also being achieved in the renewable energy subsector, where over the longer term, there is selective potential for wind, solar, and small-scale hydroelectric schemes.
- Telecommunications. The Ministry of Telecommunications and High Technologies regulates the sector, which includes television, radio, fixed and mobile telephones, and the internet. Azerbaijan has a total of 47 television channels with a national penetration rate of 99%, and cable television is becoming increasingly popular. The nation also has 27 radio stations, mostly FM stations, and 4.35 million radios currently exist. Although Azerbaijan's fixed telephone system provides reasonable coverage in urban areas, services in rural areas are poor. A substantial waiting list exists for would-be consumers. The past decade has, however, been a bonanza for the nation's cellular mobile providers. Following significant urban penetration, the ministry now plans to prioritize rural areas, fully recognizing the larger social and economic benefits that can be gained from improved connectivity. It is also implementing a major 4G internet broadband initiative, with the objective of serving every household in the nation. The ministry is also responsible for Azerpost, the government-owned national postal service.

These initiatives commenced in 2015 through assistance from ADB, World Bank, the European Union, and KfW.

ADB is assisting the Government of Azerbaijan to formulate SWM investments for two regions: the Lower Caucasus Economic Zone and the Nakhchivan Autonomous Republic.

<sup>&</sup>lt;sup>11</sup> Roads carry most passengers (79% of passenger-km), and rail carries most freight (about 70% in ton-km). The private sector provides over 95% of passenger and freight road traffic services.

There has been an unprecedented surge in internet usage, which doubled from 2008 to 2012, reaching five million subscribers in 2012. By 2012, fixed broadband subscriptions reached 1.3 million; by late 2013, mobile broadband users reached 4.1 million.

Figure 5 summarizes the short- to medium-term investments identified for each of these sectors.

## Figure 5: Identified Key Infrastructure Investment Needs

#### Water Supply and Sanitation

- In a phased manner, introduce institutional reforms for a corporatized management structure of the water utility company to reduce dependency on state subsidies and improve service efficiency, and the sustainability of assets.
- Progressively identify, prioritize, and develop centralized wastewater systems for unserved smaller towns and peri-urban areas.
- Explore and implement feasible small-scale, noncentralized sanitation systems for unserved rural areas.

#### Solid Waste Management

- Approve and implement the national solid waste management (SWM) strategy.
- Approve and implement the revised institutional, legal, and regulatory frameworks.
- Develop and implement the proposed SWM sector investments in the regions designated by the national strategy.

#### **Transport**

 Provide basic, lower-cost improvements to existing urban transport systems of selected cities, such as bus prioritization, improved bus terminals, pedestrianization, and traffic management.

## **Telecommunications**

 Install 4G internet/broadband services in currently unserved urban, peri-urban, and rural areas.

Source: Authors.

# Strategy for Urban Development

The NUA process has identified four key drivers to delivering a new urban development strategy for Azerbaijan. These are summarized as follows:

**Driver 1: Adoption of Azerbaijan 2020 and the strategic roadmap on the national economy and main economic sectors.** Azerbaijan has several core national economic strategies and program priorities that currently provide the national direction for urban development. These include *Azerbaijan 2020: A Look into the Future*, which outlines a vision for a transition from a traditional economy to a knowledge-based economy, increasing the nation's competitiveness, and diversifying the economic structure. <sup>13</sup> Critically for urban and regional development, it defines two development objectives: (i) economic diversification, toward a non-oil based economy through the development of high-value,

<sup>&</sup>lt;sup>13</sup> Azerbaijan 2020 was endorsed in 2012.

knowledge-based, industrial, trade, and service sectors; and (ii) geographic diversification, based on balanced regional and urban development. This 2020 vision has recently been reinforced by a Presidential Order, which outlines a terms of reference for the preparation of a strategic roadmap. The roadmap requires an economic development strategy and action plan to 2020, a longer-term vision to 2025, and a target vision thereafter for the diversification of the national economy led by investment in eight priority sectors. This first driver therefore supports urban development and investments that deliver on the economic and geographic diversification vision and is aligned with the objectives of Azerbaijan 2020 and the proposed strategic roadmap.

Driver 2: Addressing infrastructure investment challenges. The second driver addresses urban development and investment challenges that include (i) a reliance on high levels of government- and SOFAZ-led investment and limited private sector participation, and (ii) long-term volatility as a result of the recent, rapid fall in oil and gas revenues from 2016. Strategically, the government is decreasing oil shares in the budget to help protect the economy from future oil and gas output and price volatility. Recent developments, however, highlight the difficulties of maintaining this policy, despite significant reductions in the government's capital expenditure. The challenges for urban development and investment therefore include (i) the need to plan for the long term while meeting current financial and economic challenges and (ii) to utilize IFIs and the private sector to broaden the funding base over the longer term. Hence, this driver can be a funding mechanism or a facility at the national level that creates an investment platform for investors. This could incorporate the private sector, long-term insurance funds, and climate and other global funds to finance infrastructure at various spatial scales.

**Driver 3: Regionally balanced urbanization to address current imbalances.** The third driver is the progressive "balancing" of currently unequal urban development, both in the regional distribution of urban populations and the imbalance in the size of cities and towns. <sup>17</sup> The skewed distribution of urban population and employment in small urban centers brings two significant issues for sustainable urban development: (i) the lack of scale in the cost-effective delivery of urban services; and (ii) the inability to attract and retain industrial and business investment, and sustain demand for local market and business growth. <sup>18</sup> To meet these challenges, Azerbaijan therefore requires an integrated sustainable urban development framework that

identifies "functional urban regions" based on existing and potential competitive
advantages of a given region in order to promote industrial diversification as a basis for
regional and urban development planning, and

This includes the formation of regional development centers in the regions beyond the Baku metropolitan region, and maximizing the competitive advantages of each in order to reduce regional inequalities.

<sup>&</sup>quot;Basic Directions of the Strategic Roadmap on the National Economy and Main Economic Sectors" was approved by Order of President of the Republic of Azerbaijan in 16 March 2016.

Revenues from local taxation and charges by both municipal authorities and state-owned utilities contribute negligibly to capital expenditure for urban development and services. Urban infrastructure investment now therefore faces a challenging financial and funding environment.

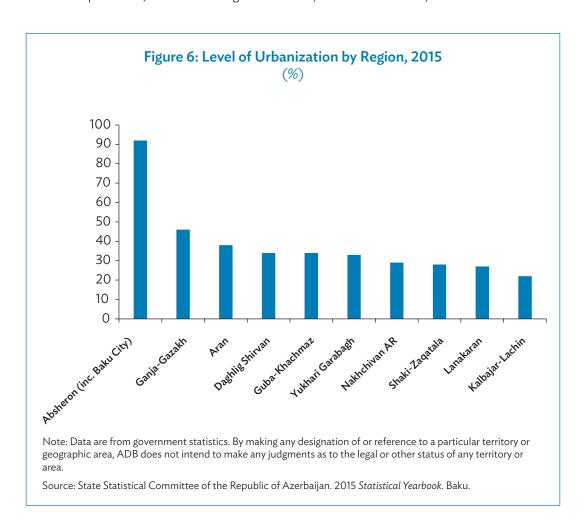
The need for balancing is highlighted by the example of the population of Greater Baku and Absheron Region, now 92% urbanized, compared with all other regions of the country that are less than 50% urbanized, with a number of regions being only 20%–30% urbanized (Figure 6).

<sup>18</sup> This often results in environmental issues and a lack of urban infrastructure investment in regional towns and cities.

 prioritizes urban centers, clusters, and corridors within the identified functional urban regions, based on their potential for cost-effective urban servicing, ability to attract industrial and business investments, and to sustain local demand.

Integrated urban and economic planning that builds on regional strengths and reduces urban imbalances is a critical tool that can support the objectives of the strategic roadmap. The NUA's analysis of existing competitive advantages and the spatial distribution of future economic activity drivers suggest the emergence of potential functional urban regions that are different to Azerbaijan's existing economic regions. Within these regions, the NUA analysis also recognizes needs and opportunities for specific urban development centers, clusters, and corridors, where investment to support urban development and diversification might be prioritized.<sup>19</sup> These are presented on Figure 7 overleaf and summarized as follows:

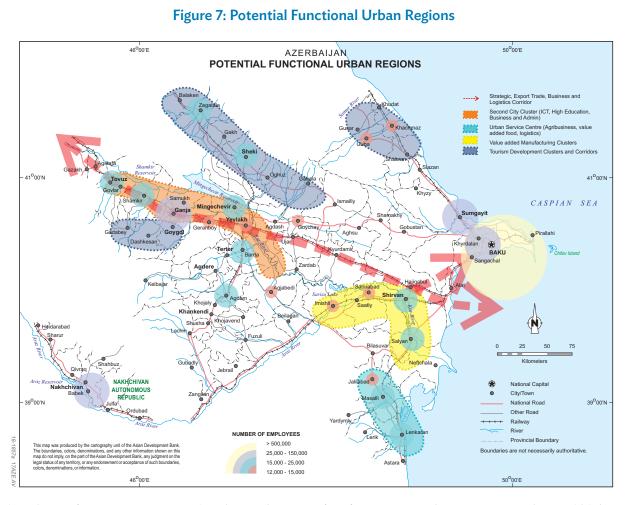
- second city urban clusters for information and communication technology (ICT), higher education, regional business, and administration;
- an export trade, business and logistics corridor, and border clusters;



This includes investment in the eight key sectors identified in the strategic roadmap.

- tourism development clusters;
- service centers for agribusiness, higher-value food production, and logistics; and
- high value-added manufacturing centers.

**Driver 4: Strengthening institutional coordination and delivery mechanisms.** The fourth driver is to strengthen regional and inter-urban coordination, as well as local delivery of urban development and service management. The existing structure of urban governance, funding, and service delivery is led by a strong and well-resourced national government, coordinated and delivered at the local city or town level through direct administration from the national to the *rayon* Executive Power levels. With the exception of the Nakhchivan Autonomous Republic (NAR), however, there is no regional level of governance or administration. Also, the municipalities are small and poorly resourced, with most lacking the scale, funding, staff capacity, training, experience, or knowledge to implement the limited urban service responsibilities prescribed to them by law.



Note: Data are from government statistics. By making any designation of or reference to a particular territory or geographic area, ADB does not intend to make any judgments as to the legal or other status of any territory or area.

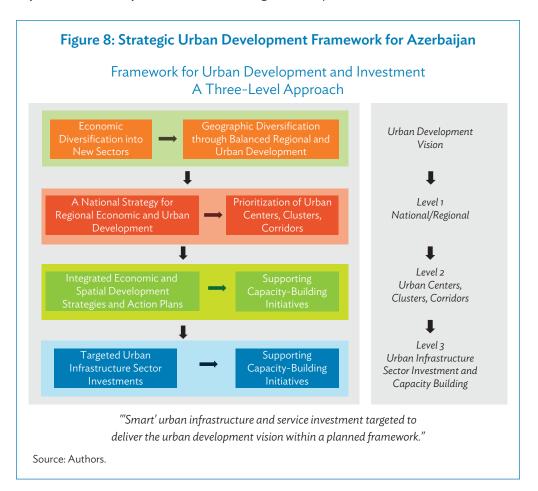
Source: State Statistical Committee of the Republic of Azerbaijan. 2015 Statistical Yearbook. Baku.

Integrated urban development strategies will therefore enhance regional and urban development by bringing together spatial development and local economic development plans, and environmental strategies. This level of coordination will, however, require the largely independent *rayon* Executive Powers to act in conjunction with others to meet cluster development objectives, and promote service–sharing arrangements for costeffective service delivery. This can be achieved by the following steps:

- building on the strengths of the existing structure of strong and well-resourced national government;
- strengthening technical and human capacity at the smaller city and rayon levels;
- addressing weak and poorly resourced municipal government to support local services and community development initiatives; and
- considering potential public-private partnership (PPP) models for urban investment.

# Framework for Urban Development and Investment

To deliver the drivers of change, the NUA suggests a three-level approach to formulating an urban development strategy that delivers on the economic and geographic diversification objectives of Azerbaijan 2020 and the strategic roadmap:



- First, a national strategy for regional economic and urban development is required to guide
  the sustainable development of each of Azerbaijan's economic regions, based on their
  individual and unique competitive advantages, and to identify and prioritize regional
  development centers, clusters, and corridors.
- Second, integrated economic and spatial development strategies, and action plans for
  prioritized urban development centers and clusters are required, together with the
  capacity strengthening of city and rayon Executive Powers and other local institutions
  to ensure that they are capable of managing urbanization and delivering urban
  services.
- Third, based on the previous two approach levels, priority targeted urban infrastructure sector investments and supporting capacity-building initiatives can be designed and implemented at the national, regional, and local levels to meet the urbanization demands of the future.

Figure 8 presents this approach graphically, showing how the urban development vision can be delivered by action at these three levels of intervention.

# The Way Forward

This three-level framework will enable the targeting of urban infrastructure and economic sector investments and capacity-building initiatives. Recommended priority interventions are grouped into the following three areas of support:

- Regional and urban planning support. Advisory and capacity-building support to
  prepare a national strategy for regional economic development and integrated urban
  action plans.
- Integrated urban development investments. Infrastructure investments that support
  the diversification of the economy and achieve cost-effective urban infrastructure and
  service provision. This includes investments with prioritized action plans covering the
  current sectors of focus including water and sanitation, SWM, transport, energy, and
  telecommunications. A critical component is the institutional reform and capacity
  development to corporatize urban utility agencies where practicable, to ensure the
  efficient management of services and sustainability of assets.
- Economic sector development interventions. Interventions to support the
  diversification and balanced regional development of industrial and service sectors
  through infrastructure investment, regulatory advice, and capacity-building support.
  Such sectors include tourism, ICT, export trade and logistics, and improving higher
  education and technical and vocational education and training (TVET) skills.

The three areas of support and recommended priority interventions are presented in Figure 9.

**Figure 9: Recommended Priority Interventions** 

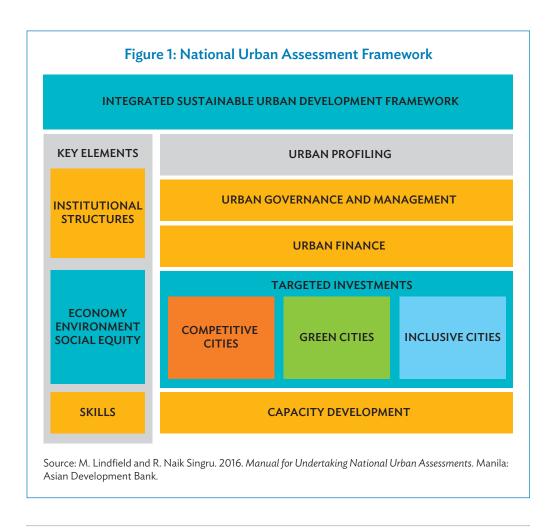
Grouping	Intervention Area	Description
id Urban iupport	National Strategy for Regional Economic Development	<ul> <li>Evaluate functional economic regions</li> <li>Identify urban centers, clusters, and corridors</li> <li>Update regulatory and legislative frameworks</li> <li>Integrate economic and spatial planning</li> </ul>
Regional and Urban Planning Support	Priority Urban Area Development Strategies and Action Plans	<ul> <li>Prioritize urban centers, clusters, and corridors</li> <li>Support preparation of strategies and plans</li> <li>Implement sector assessments, roadmaps, and investment plans</li> <li>Strengthen local institutional capacities</li> <li>Identify priority projects for IFI or private sector financing</li> </ul>
Urban Infrastructure Sector Investments	Water Supply and Sanitation	<ul> <li>Institutional reform to improve service efficiency and sustainability of assets</li> <li>Corporatize utility to improve financial management and reduce dependency on state subsidies</li> <li>Decentralized wastewater systems for smaller towns and peri-urban areas</li> <li>Small-scale sanitation systems for unserved rural areas</li> </ul>
re Sector I	Solid Waste Management  National SWM strategy Revised institutional, legal, and regulatory frameworks SWM sector investments in designated regions	
ıctu	Transport	Low-cost urban transport improvements in selected cities
astru	Energy	Power distribution system rehabilitation and expansion
an Infr	Telecommunications	Internet and broadband services in unserved urban, peri-urban, and rural areas
Urb	Climate Change Mitigation	<ul> <li>Environmental impact assessment policy and regulations</li> <li>Emissions control and mitigation</li> <li>Climate proofing</li> </ul>
	Tourism	<ul> <li>Creation of hotel enterprises</li> <li>Public and private investment in leisure and visitor facilities</li> <li>Restoration of heritage sites and buildings</li> <li>Management and promotion of national parks</li> </ul>
ent	ICT	Support for both hardware and software technology production     Development of science, research, and technology parks
Development	E-business development	<ul> <li>Rollout of the national 4G-internet/broadband initiative</li> <li>Investment in Azerpost to promote e-business in regional and rural areas</li> </ul>
	High Value-Added Manufacturing	Best practice organizational models to support industrial entrepreneurship     Development of industrial technology parks and business incubators
Economic Sector	Export Trade and Logistics	<ul> <li>Improve and upgrade logistics infrastructure</li> <li>Promote free trade and export processing zones</li> <li>Improve customs and foreign trade capacity in key cross-border locations</li> </ul>
Eco	Agribusiness and High-Value Food Production	<ul> <li>Investments in farm to market infrastructure</li> <li>Development of greenhouse and refrigerated logistics centers</li> <li>Removal of market access restrictions</li> </ul>
	Improving Higher Education and TVET Skills	<ul> <li>Expand higher education places in technology institutions</li> <li>Develop university, research, and technical institute campuses in conjunction with research, science and technology parks</li> </ul>

ICT = information and communication technology, IFI = international finance institution, SWM = solid waste management, TVET = technical and vocational education and training.

Source: Authors.

# 1 Introduction

This National Urban Assessment (NUA) is one of the first of a knowledge product series of NUAs being prepared for selected Asian Development Bank (ADB) developing member countries (DMCs) under ADB's Urban Operational Plan (UOP) 2012–2020.¹ Its primary objectives are to present a concise snapshot of the urban sector and urbanization processes currently at work in Azerbaijan, and to present recommendations to refine urban priorities, develop policy options and targeted investments, and enable urban action. The NUA has



ADB launched its UOP at the Asian Urban Forum in November 2011. Through the UOP, ADB assists DMCs to develop their urban economies while prioritizing environmental sustainability and pro-poor investment.

been prepared in accordance with the ADB Manual on National Urban Assessments based on key thematic areas in Figure 1.<sup>2</sup> Its formulation includes two broad development phases:

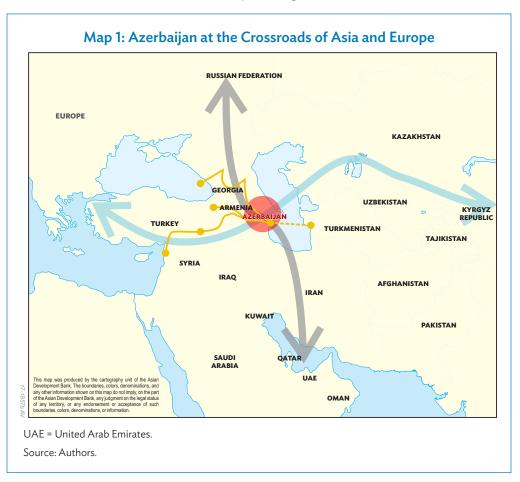
- (i) **Urban profile.** Analyses covering the themes of political and economic system, urbanization, governance and urban management, legislative and regulatory frameworks, urban finance matrix, capacity needs assessment, and a 3E (economy, environment, equity) analyses of urban infrastructure and service provision, and bilateral, multilateral, private sector, and nongovernment urban program assessment.
- (ii) **Urban vision, strategy, and prioritization.** Includes an urban sector strategy based on strategic investment priorities for the country and/or urban regions, and a strategic urban infrastructure investment plan.

<sup>&</sup>lt;sup>2</sup> This manual provides an integrated framework for rapid urban sustainability assessment for DMCs at both the national and urban region levels in order to develop strategic policy options and targeted investments in the urban sector.

# 2 Country Profile

# 2.1 Location: At the Crossroads of Asia and Europe

Azerbaijan, located in the southeastern part of the Caucasus region, extends westward from the Caspian Sea. Uniquely positioned at the crossroads of Asia and Europe, it is halfway between the time zones of Europe and Asia and hence in an advantageous position for global links (Map 1). The nation is also an important regional member of the Central Asia Regional Economic Cooperation Program that links the region to Europe, the People's Republic of China, the Russian Federation, the Middle East, and South Asia. It has large oil and gas reserves—in ancient times it was called "the land of fire" because of its burning gas vents—and is one of the world's oldest oil-producing nations.



Geographically, Azerbaijan borders the Caspian Sea to the east, into which the Absheron peninsula projects. Its total population is around 9.6 million (2015), with just over 5 million (53%) recorded as the urban population.<sup>3</sup> Of this population, about 2.2 million are located in Baku, the capital city, and only the cities of Sumqayit (332,900) and Ganja (328,400) had populations exceeding 100,000. Sumqayit is located in the economic region of Absheron that also includes Baku; this oil-rich region has a combined urban population of over 2.6 million, which is 53% of the nation's total urban population. The geographically largest economic region is Aran, a predominantly agricultural region in the nation's center that has a rural population of more than 1.2 million, yet only two urban centers of over 80,000 population. In contrast, the economic region of Absheron, including Baku, has a population of more than 2.7 million, but a land area of only 5,900 square kilometers. The level and spatial pattern of urbanization is detailed further in section 2.4. Map 2 presents the nation's largest population centers, while Map 3 shows the nation's economic regions.

# 2.2 Political History and System: Transition at the Crossroads

Azerbaijan became an independent republic in 1918, but soon after joined the Soviet Union (1920). The country declared sovereignty again in 1990 and elected a President and national government. For statistical purposes, the country is divided into nine economic regions and the Nakhchivan Autonomous Republic (NAR). The nine regions comprise 56 rayons (districts) and 10 sahari (cities and larger towns). The President of the Republic appoints governors of rayons and cities, which are administered by a local Executive Power. The exception to this is the NAR, an economic region and exclave that is physically separated from Azerbaijan's primary landmass and comprises seven rayons and one city. The NAR is an autonomous state headed by the chairman of the Ali Majlis (elected Parliament) of the NAR, who is appointed on the recommendation of the President of the Republic.

Since independence from the Soviet Union in 1990, the government has carefully balanced relations between the United States, European Union, the Russian Federation, and Turkey. Azerbaijan remains a Commonwealth of Independent States (CIS) country, but it is also situated at an important political crossroads. In recent years this has manifested itself in pro-European policies and aspirations and, where appropriate opportunities have presented themselves, greater integration with European institutional and regulatory frameworks—such as Azerbaijan's membership of the Council of Europe and participation in the European Neighbourhood Policy and the Eastern Partnership—and aligning the nation's legal framework and practices with European standards.

**State governance at the national and local levels.** Since independence, Azerbaijan has pursued the establishment of a legal state and promotion of civil society as priority strategic objectives. Most major legislation incorporates these principles from the *Constitutional Act on the Independence of the Republic of Azerbaijan* (adopted in October 1991) to the Constitution itself (adopted in November 1995). Azerbaijan's presidential form of

Unless otherwise stated, the source of all demographic data in this report is from the Demographic Indicators of Azerbaijan-Statistical Yearbook 2015 of the State Statistical Committee of the Republic of Azerbaijan, Baku, 2015. The data point is nominally 1 January 2015.

government concentrates powers in the executive branch. Legislative powers are vested in the *Milli Mejlis* (National Assembly), and Parliament is evolving as a body balancing the strong executive power.<sup>4</sup>

The government of Azerbaijan is also exercised through local (and, in the case of the NAR, by regional) bodies of state administration and through municipal governments, each of which have roles and responsibilities in urban development and services and are considered separate. These are presented in Figure 2 (page 6). The President of Azerbaijan is responsible for the local branches of state administration (locally known as Executive Powers) in *rayons* and cities, and appoints a head (or governor) to manage its operations. Heads of the local state administration exercise executive responsibilities in their areas including economic, social, and cultural development and coordinate the roles of the state administration locally. Specific duties include

- carrying out the orders of the President;
- implementing state and local programs authorized by the President;
- establishing, appointing, and dissolving heads of local state administration departments, services, enterprises, and organizations; and
- submitting local development issues and proposals to the appropriate executive bodies.

All local administration expenses are financed from the state budget. This structure and approach to governance at the local level, exercised through national government powers and resources, reflects the traditions of the pre-independence system.

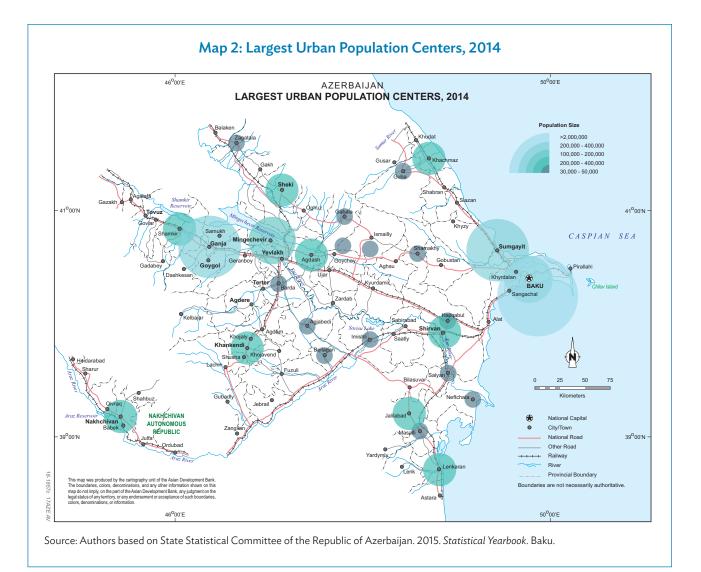
The notable exception to this is that state regulation of the republic is based on the principle of the "division of states," and under this provision, the NAR is free to resolve the issues that relate to its powers, including all urban development and service functions, effectively giving the NAR a regional government status not enjoyed by any other economic region of Azerbaijan. The President of the Republic nominates the Prime Minister, while the composition of the Cabinet of Ministers is proposed by the Prime Minister and approved and appointed by the NAR parliament. The city and the *rayons* of the NAR are also administered by Executive Powers, although in this case, the President of Azerbaijan also appoints the Executive Powerheads.

**Municipal Governance and Finance.** There is, however, a second parallel system of local governance to the local Executive Powers, which is a part of the state governing structures directly appointed by the President. This comprises elected municipalities (*Belediyye*), which are accountable to the citizens and the national Parliament.

A review of municipal governance notes that there is, however, "no precedent for a comprehensive system of local self-government to be found in Azeri history." Preindependence, local government was exercised through local Soviets and executive committees as part of state administration. As Mamedova et al. have pointed out, the campaign to establish municipalities only began after July 1999, when the Law on Municipal Elections and the Law on the Status of Municipalities were passed. The first municipal

Azerbaijan's parliamentary body comprises 125 members of Parliament, each elected for a 5-year term.

Mamedova et al. 2002. Local Government in Azerbaijan. In Local Government and Public Service Reform Initiative, Local Governments in the Caucasus and Central Asia. Chapter 7. Budapest.

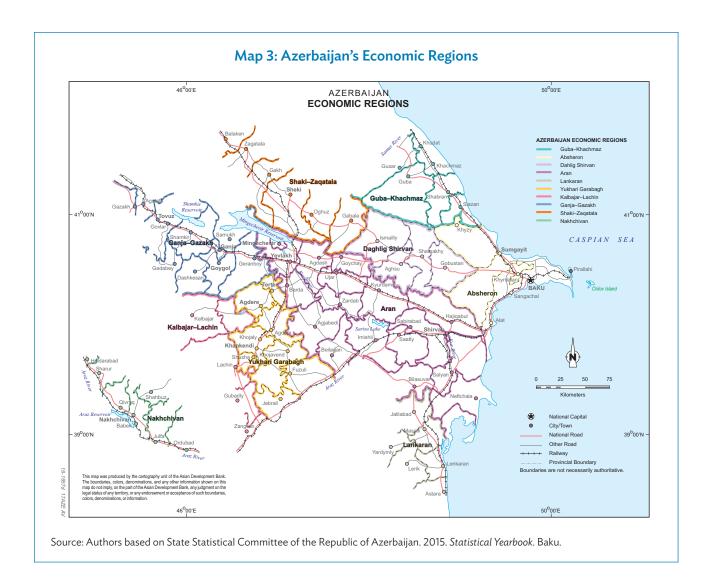


elections, held in December 1999, resulted in a total of 2,591 municipal governments commencing activities in January 2000 with over 22,000 elected officials.

Each municipality acts as an independent juridical entity, with neither horizontal nor vertical subordination (Figure 2). Typically, *rayons* are divided geographically into multiple independent administrative-territorial units, each unit comprising a separate municipality. Subsequently, the Council of Europe, which Azerbaijan joined in 2000, has supported the process of rationalization of this large number of municipalities with the adoption of the law "On creation of new municipalities by merging municipalities in Azerbaijan." This reduced the total number of municipalities with populations under 1,000 in the 2004 elections. As a result, the subsequent municipal elections in 2009 elected 1,718 municipalities and 1,607 municipalities in 2014.

According to Article 144 of the law, municipal councils are to perform the following functions:

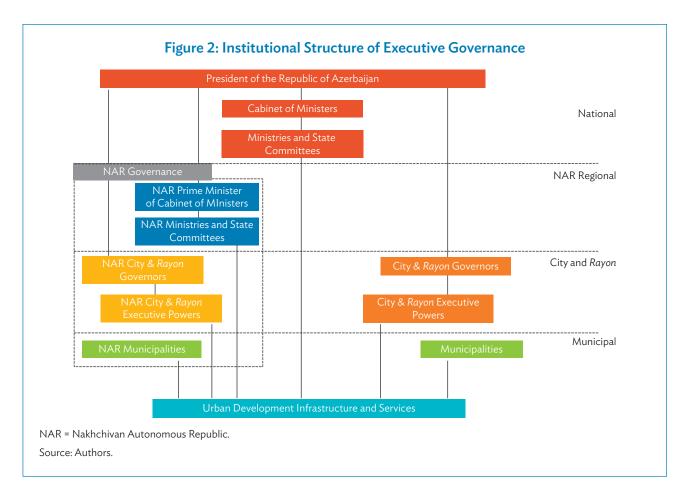
- Adopt municipal legislation.
- Elect the council chairman and deputies.



- Establish standing and temporary commissions.
- Establish local taxes and duties.
- Adopt the local budget and report on budget performance.
- Manage and dispose of municipal property.
- Adopt and implement programs for social protection and development, local economic development, and the local environment.

Mamedova et al. note that municipal finances comprise local budgetary and nonbudgetary funds, municipal property, municipal lands and profit from production, services, and other economic activities. However, although municipalities have these broad financial powers, there is only a very limited precedent for exercising them. In reality, such a large number of small municipalities are not able to balance their local budgets based solely on their own revenues and lack skills to leverage resources.

Municipal property is a potentially important asset base for municipalities and much of this property was state property that has been transferred to municipal ownership.



Municipalities may rent municipal property, or use it as collateral when entering into contracts. In the interests of local citizens, the municipality may set conditions for the use of lands falling within municipal boundaries. Municipalities may also privatize municipal services but there is no framework and very few precedents for promoting private sector participation.

As Mamedova et al. have also emphasized, it is apparent that "local government reforms in Azerbaijan are based on the decentralization of state authority and there is a general tendency to transfer even more powers to municipalities." In practice, their responsibilities are very limited, however, and, at best, are related to the maintenance of municipal roads, cemeteries, parks, and some aspects of social care delivery that are not covered by the central government. Municipalities, in most cases, do not have adequate scale, financial or staffing capacity, training, experience, or knowledge to carry out the limited responsibilities prescribed by law.

Community-based organizations. The community-based organization sector is active, with approximately 3,000 nongovernment organizations registered, though not all are actively functioning and many depend on funding from international donors. As incomes rise and spread within Azerbaijan, expectations for greater participation are likely to grow. In this context, developing mechanisms for greater accountability and social inclusion are gaining importance.

#### **Summary**

- Azerbaijan is at a crossroads—locationally, politically, and economically. Its strategic location marks its transition from the Commonwealth of Independent States (CIS) and policies aimed at European integration.
- Its presidential form of government concentrates both national and local government powers at in the executive branch of the state administration.
- Nearly 1,800 small independent municipalities do not have sufficient scale, finance, or capacity to carry out responsibilities prescribed by law.

# 2.3 Economy: Economic Diversification at the Crossroads

Gross domestic product (GDP) annual growth rates declined to 2.8% in 2014, went back up to 5.7% in mid-2015 but fell back to 1.0% by the end of 2015—this volatility being largely a result of the recent rapid decline in the world's oil price. The GDP growth forecast of the Asian Development Bank (ADB) for Azerbaijan has been revised downward to a -1.0% decline per annum for 2016 recovering to just 1.0% for 2017 on the strength of an improved external outlook and somewhat higher petroleum prices.<sup>6</sup>

Historically, following a period of rapidly declining GDP as a consequence of the transitioning from the Soviet economy from 1990 to 1995, Azerbaijan enjoyed a period of around 10% steady annual growth to 2005 in its subsequent transition to a market economy. Further, in the next 5 years, Azerbaijan's GDP grew by an unprecedented average of over 20% per annum from 2005 to 2009 as its oil production came on stream. Economic growth rates have declined sharply since the international economic crisis from 2008 to 2010 on the back of a 10.6% decrease in oil output in 2011, but remained around 5% per annum to 2013, and is expected be more modest in the medium term.

The story of Azerbaijan's economic transition has therefore been one of an "oil economy," as, until recently, hydrocarbons have typically accounted for about 50% of GDP and over 90% of exports. As a result, until 2015, annual increases in budget expenditures have been made possible through large transfers from the State Oil Fund of the Republic of Azerbaijan (SOFAZ), a well-run fund that has received international recognition (Box 1). To date, the government has saved about half of its fiscal revenues from oil, and the Oil Fund constituted 42% of projected total state budget revenue in 2015—but having declined from 58% in 2013. The government has also utilized a substantial portion of this to fund an ambitious public investment program to strengthen its infrastructure and social services. The key feature of Azerbaijan's economic development policy is to use the oil surplus to meet the infrastructure needs of diversification to a non-oil economy, and to provide increased wages and social transfers, which has helped reduce poverty levels rapidly.

ADB. 2016. Asian Development Bank Outlook 2016 Highlights. Manila.

## Box 1: The State Oil Fund of the Republic of Azerbaijan

The State Oil Fund of the Republic of Azerbaijan (SOFAZ) is the cornerstone of the country's natural resource revenue management strategy. It was established in 1999 with support from the International Monetary Fund and the World Bank to accumulate excess oil and gas revenues. SOFAZ governance, news, and accounts are published on its website (www.oilfund.az).

Oil fund expenditures are part of the consolidated budget, approved by Parliament and executed through the single treasury account. Financial reports are disclosed and audited annually. It is recognized internationally for the high quality of its management. It received the 2007 UN Public Service Award, and in 2009, Azerbaijan was the first country to receive validation as compliant under the Extractive Industries Transparency Initiative.

SOFAZ also received the highest rating for transparency by the *Sovereign Wealth Fund Institute* in 2009. In 2010, it announced that, together with investment funds from the Netherlands, the Republic of Korea, and Saudi Arabia, it would invest in the newly created African, Latin American, and Caribbean Fund under the auspices of the International Finance Corporation.

Source: World Bank. 2010. Country Partnership Strategy for Azerbaijan 2011–2014. Washington, DC.

Today's Azerbaijan is a modern republic at an economic crossroads: exploring how best to develop its economy in an equitable way while making the most of its oil and gas reserves. The experience of the global economic crisis highlighted the importance of strengthening the non-oil economy, particularly in light of the decline in oil and gas revenues. The need to establish new sources of growth beyond oil and gas revenues is therefore critical. It is this diversification that will shift the drivers of growth away from the oil sector and toward the non-oil economy. Progress in economic diversification and the creation of a competitive non-oil economy will likely depend on a variety of policy measures, such as stimulating sectors with high employment potential; changes in regulations and governance; expanding and improving technical and vocational education and training and introducing initiatives to improve productivity, infrastructure, and services investment.

Azerbaijan's economic policies aim to achieve a sustainable, diversified economy with a vibrant non-oil sector, global integration, and balanced development throughout the country. These objectives are expressed in three main programs and plans:

- State Program on Poverty Reduction and Sustainable Development, 2008–2015.

  The program contains nine strategic goals that, among others, promote macroeconomic stability and balanced development of the non-oil sector to reduce poverty, assist vulnerable groups (including refugees), improve and expand access to education and health systems, protect the environment, and support gender.
- Azerbaijan 2020: Look into the Future. In 2012, the government endorsed a new vision document, Azerbaijan 2020: Look into the Future (Box 2). This envisages economic diversification and expanded opportunities for citizens through non-oil sector development, and lays the foundation for a transition from a traditional economy to a knowledge-based economy and the emergence of knowledge-intensive products. It entails Azerbaijan becoming internationally competitive, economically, and politically developed: more than doubling its GDP per capita to \$13,000 in the 8 years to 2020. The inclusive growth agenda consists of (i) high social welfare, (ii) sustainable economic

growth, and (iii) broad opportunities and decent jobs for all. It also has explicit regional development objectives: (i) forming regional development centers and maximizing the competitive advantages of each; (ii) reducing regional inequalities; and (iii) improving remote village access to communication, health, education, and financial services. Azerbaijan 2020 is now widely recognized as the strategic economic development policy framework by all government agencies and has been recently reinforced by a Presidential Order for the preparation of a "Strategic Roadmap" for the diversification of the national economy led by investment in eight key sectors.

State Program on Socioeconomic Development of Regions, 2014–2018. Job
creation in the regions is a key concern. To tackle widespread regional disparities, the
government undertook an analysis of the regions in 2003 and based on the results, the
State Program on Socioeconomic Development of Regions 2004–2008 was drafted
and implemented. A successive regional program covered 2009–2013 and a third state
program is building on the success of the previous programs.

# Box 2: Azerbaijan 2020: A Look into the Future

Azerbaijan's biggest challenge today is diversifying away from hydrocarbons, which represent more than 90% of the country's total exports, a 60% increase from 15 years ago. The country expects to capitalize on hydrocarbons for at least another 40 years, but oil production is believed to have peaked and Azerbaijan must do more for its non-oil economy. For the government, this is a clear priority.

Economic diversification is therefore a cornerstone of the country's principal development concept, *Azerbaijan 2020:* A look into the Future, adopted in 2012. It positions Azerbaijan to become a politically developed and economically competitive country by 2020, applying its regional leadership to a global scale. Particular emphasis is placed on the strengthening of non-oil industries, transitioning the country into a knowledge-based economy, and exploiting Azerbaijan's strategic position along international trade routes. For investors, this opens a new chapter of opportunities, particularly in view of further regional integration and rapid progress in the development of Azerbaijan's infrastructure and services.

Source: Excerpt from "Azerbaijan 2020: Turning Strength into Stability." Foreign Affairs Magazine, 2015.

#### Summary

- From 2010 to 2013, Azerbaijan's economic transition and growth at 5%–10% per annum has been fueled by its 'oil economy' with hydrocarbons typically accounting for 50% of GDP and over 90% of exports.
- Continuous annual increases in state budget expenditures have been made possible through state oil revenues and large transfers from the SOFAZ.
- However, periodic fluctuations in oil prices and revenues have impacted growth and expenditure significantly, including the current decline to 1% growth in 2015 and a projected GDP fall in 2016.
- As a result, current economic policies and Azerbaijan's Vision and Strategic
  Roadmap for 2020 will aim for a transition from reliance on oil and gas production
  toward a sustainable, diversified economy with a vibrant non-oil sector and
  balanced development throughout the country.

### 2.4 Urbanization Profile

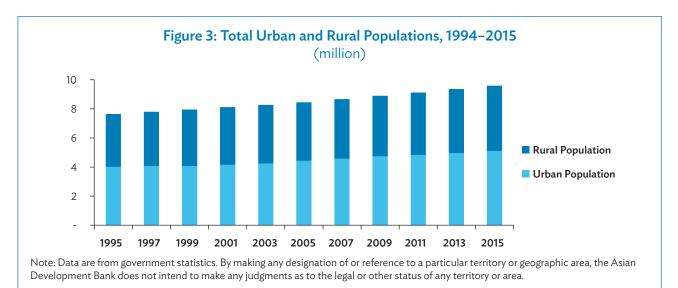
#### 2.4.1 Demographic Analysis

Since its independence, Azerbaijan has maintained a highly urbanized population (52.4% in 1995 and 53.1% in 2015), where urban areas are currently home to more than 5.0 million of the country's more than 9.5 million inhabitants. Although this level of urbanization has been relatively steady, the actual population of the urban areas has increased since 1995, growing from 4.0 million to more than 5.0 million by 2015, an increase of over 27%. This was paralleled over the same period by the rural population, which grew by 24% from 3.5 million in 1995 to more than 4.4 million in 2015 (Figure 3).

This steady growth rate and stable distribution of urban and rural populations, however, disguises the key drivers of urbanization in many areas. This is highlighted by the rapid urban population growth rate of Baku and the surrounding Absheron region that grew from 338,300 to 508,100 from 1995 to 2015, a growth of over 50%. This compares dramatically with the urban population growth rate of Ganja that during the same period increased from 493,100 to only 571,000, a growth rate of just 16% (Figure 4). Over the past 2 decades, population distribution has also been significantly impacted by the displacement of an estimated 1 million Azerbaijanis in the early 1990s, many of whom migrated to the Baku and the wider Absheron region.

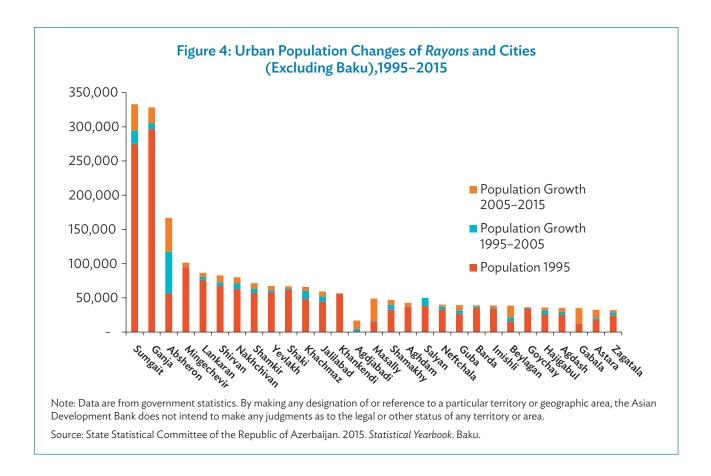
#### 2.4.2 Spatial Analysis

As Figure 4 also shows, in 2015, Azerbaijan had 30 *rayons* or cities with urban populations of over 30,000. However, the urban population of the three cities of Baku (2.2 million), Sumgayit (332,900) in Absheron Region, and Ganja (328,400) were the only cities with populations over 250,000 in 2015.<sup>7</sup> The remaining urban settlements of the Absheron



Source: State Statistical Committee of the Republic of Azerbaijan. 2015. Statistical Yearbook. Baku.

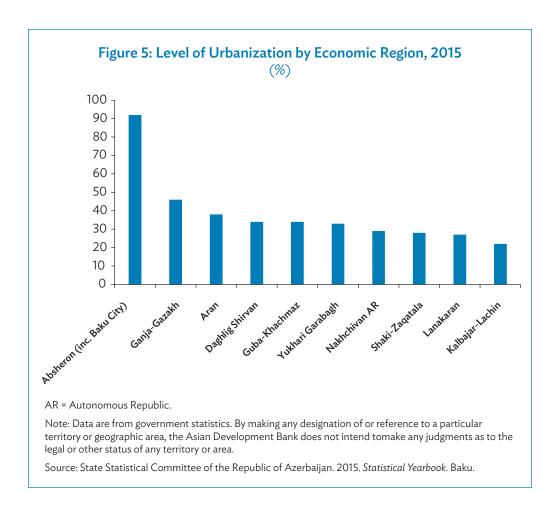
The Statistical Yearbook of the State Statistical Committee of the Republic of Azerbaijan defines the population of identified "towns" and "settlements" in each rayon, and the populations of "cities," as "urban population," and this definition has therefore been used throughout this analysis.



Region (principally Khirdalan) had a population of 167,000 and the 26 remaining *rayons* had urban populations of 30,000–100,600. However, the populations of most urban centers have grown since 1995, mostly 10%–35%, with smaller towns such as Masally, Beylagan, Gabala, and Agdjabadi growing by 50%. Although from a low base, this has placed pressure on urban infrastructure.

Azerbaijan has an average population density of 109 persons per square kilometer. Baku, the capital, is the nation's most densely populated area (1,024 persons per square kilometer), distributed over an administrative land area of only 2,130 square kilometers (only 2.5% of the nation's total land area). Baku's urbanization level (the urban population as a proportion of total population) is 100%. The Absheron Economic Region closely follows this (92.1% urbanization), with Ganja–Gazahk, Azerbaijan's second city region, only being 46.1% urbanized. Other regions have even lower urbanization levels, ranging from 27% to 34% (Figure 5).

The location of the urbanized population coincides with the size distribution. The easterly economic capital region of Absheron has nearly 2.7 million urban inhabitants including Baku (2.2 million), nearby Sumqayit (333,000), and 167,000 in the other growing port and industrial cities of Absheron such as Khirdalan, Sangachal, and Alyat. As its population continues to grow through "in-migration," the settlement of internally displaced persons (IDP), the growth of the oil industry, and subsequent growth of the non-oil economy, Greater Baku is destined to stay as the leading industrial, commercial, administrative, sociocultural, and educational center of Azerbaijan.



Beyond Baku and the Absheron Peninsula, it is only the Ganja–Gazkh area and the northwest part of the Aran Region where cities and towns form a significant urban concentration—albeit split between three economic regions. This concentration includes (i) Ganja and Shamkir in the Ganja–Gazakh region, (ii) Shaki of the Shaki–Zaqatala region, and (iii) Mingachevir and Yevlakh in Aran region. This clustering of towns with populations of 30,000 to 110,000 within an 80-kilometer radius around Ganja had a total urban population of 446,500 (2015), which, together with the 328,400 population of Ganja itself, totals over 700,000.

There are no urban settlements with a population of over 50,000 in the remaining central area of the nation's largest economic region of Aran, or in the adjoining Daghlig Shirvan region, which is the "agricultural heart" of the country. This despite this region containing nearly half of the nation's total agricultural land (825,000 hectares) being utilized for agriculture in the broad Kur River valley. The mountainous Guba–Khachmaz economic region in the nation's north, which has experienced a period of tourism-led growth, has only two towns, Khachmaz and Guba, with populations of over 30,000.

#### 2.4.3 Internally Displaced Persons

A World Bank study identified approximately 595,000 people (7% of the population) as displaced, making it one of the highest concentrations of IDPs per capita in the world. Most of the displacement occurred during conflicts from 1988 to 1994. The

World Bank. 2011. Azerbaijan: Building Assets and Promoting Self Reliance: The Livelihoods of Internally Displaced Persons. Washington, DC.

internally displaced population comprises a large percentage of children (40.8%) and elderly persons (10.1%). IDP households are also slightly smaller and younger than the households of non-IDPs. IDPs live in all 69 districts of Azerbaijan, with the largest groups living in Baku, Sumgayit, and the other urban areas of Absheron (Table 1). As a result, there are significantly more urbanized than non-urbanized IDPs.

The policy of the government and IDPs themselves is overwhelmingly oriented towards the return of affected populations to their land of origin. Resettlement processes are therefore intended to only provide temporary accommodation, until such time that IDPs can return to their original communities. However, few have been able to return and resettlement is concentrated in collective centers (33%), temporary shelters (15%), and with relatives (12.5%). Only 27% are in houses or apartments, and only 12.5% in the new, dedicated settlements.

The government has established the State Committee on Refugees and IDP Issues, which represents IDP issues in the Cabinet of Ministers and has allocated an estimated 3% of GDP toward measures to support the IDPs. This equated to an average per capita state spend in 2010 of AZN684.9 Since 2003, government has allocated a total of approximately AZN770 million.

Table 1: Internally Displaced Persons Concentration in Rayons, 2008

Rayon/City	Number	Percent
Baku City	186,644	30.1
Fuzuli	65,565	11.0
Sumgayit	50,573	8.5
Aghdam	38,378	6.4
Barda	33,582	5.6
Mingachevir	20,093	3.4
Bilasuvar	19,583	3.3
Ganja	15,602	2.6
Agjabedi	15,573	2.6
Terter	15,403	2.6
Beylagan	14,856	2.5
Absheron	14,127	2.4
Lachin Grounds	12,445	2.1
Yevlakh	11,749	2.0
Goranboy	9,368	1.6
Qazax	7,304	1.2
Others	67,249	11.3
Total	595,094	100.0

Note: Data are from government statistics. By making any designation of or reference to a particular territory or geographic area, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

Source: State Committee on Refugees and IDPs, January 2011, quoted in World Bank. 2011. Azerbaijan: Building Assets and Promoting Self Reliance: The Livelihoods of Internally Displaced Persons. Washington, DC.

The majority of this funding is from SOFAZ to improve infrastructure and housing, and the construction of new settlements.

#### 2.4.4 Land Use, Land Management, and Land Use Planning

Azerbaijan's land area is classified as agricultural (55.1%), forest (12%), water (1.7%), and other uses (31.2%). Progressive land reform was implemented in Azerbaijan in the 1990s, with laws currently providing for basic rights in land ownership, leasing, and use. Legislatively, real estate is referred to as "immovable property" and is subject to state registration under the Register of Immovable Property. The State Committee on Property Issues is the central executive body responsible to implement policy and regulations regarding state property management and privatization. It is also responsible for the maintenance of Azerbaijan's state register and its unified cadastre of immovable property.

Azerbaijan was one of the first former Soviet Republics to introduce the private ownership, trade, and transfer of land titles, and the distribution a large portions of land to its population. A substantial amount of formerly state-owned real estate has been either sold or distributed to the public and to businesses. The concept of ownership in Azerbaijan includes the right to exercise possession, use, or benefit, and dispose of land. The right to own land is, however, extended only to the Republic of Azerbaijan, municipalities, and Azerbaijani individuals and legal entities. Foreigners and stateless individuals may not own land; however, international organizations, foreign legal entities, and foreign citizens and states may lease land.

The process of land privatization has been actively pursued since 1996. Through the support of the World Bank, an online registration system, mobile service, and local branch offices have been established in all *rayons* to support land registration.<sup>11</sup> As a result, 80% of residential property has now been privatized. The current ownership of all lands and property in Azerbaijan is now divided into government (4.9 million hectares, 57% of the total), municipalities (2.1 million hectares, 24% of the total), and private (1.7 million hectares, 20% of the total). Despite the disposal of most state and municipal housing property, the municipalities are still significant holders of land assets.

Policies on urban land use classification and development of land are important to establish a well-functioning, coordinated system of land management and a centralized land use database system with geographic information system mapping is essential to ensure efficient land management and integrated urban planning. The Council of Europe indicates that private property is generally respected in Azerbaijan, and that progress has been made to introduce a "one-stop shop" and assign the role for all property registration exclusively to the State Committee on Property Issues. According to the World Bank's *Doing Business Report 2015*, Azerbaijan currently ranks 10th on property issues. However, frequent interference with legal in property rights processes remain and the Council of Europe has, for example, urged the authorities to provide more adequate compensation during expropriation procedures.<sup>12</sup>

**Urban Land Use Planning.** The urban land use planning system in Azerbaijan has been in transition since February 2006 when the State Committee for Construction and Architecture was abolished and the State Committee for Town Planning and Architecture

<sup>&</sup>lt;sup>10</sup> This is in accordance with the Law on the State Register of Immovable Property.

<sup>&</sup>lt;sup>11</sup> These are branch offices of the State Committee on Property Issues.

This is stated in the Parliamentary Assembly of the Council of Europe, Resolution 1917 (2013), The Honouring of Obligations and Commitments by Azerbaijan.

(SCUPA) was established. SCUPA is mandated as the central executive body to implement state policy and regulation on town planning, project development, design, and architecture. Its primary construction and architecture functions include (i) ensuring compliance of urban construction with state policies, (ii) development of the building sector, (iii) protection and preservation of national architectural assets, and (iv) improving the quality of architectural planning and the design of buildings.

SCUPA is now also charged with the assurance of proper use of territories and their resources in cities and their surroundings. Pre-independence, there were master plans for most urban areas and many of these—some were updated four or five times—still formed an outdated basis for urban development. The development of more modern urban land use planning has been encouraged with assistance from the international finance institutions (IFIs) through two major initiatives:

- A 20-year urban master plan for the development of Greater Baku, including Baku, Sumgayit, and Absheron, prepared by SCUPA with World Bank assistance.
- Promulgation of the Town Planning and Construction Code of Azerbaijan, prepared in June 2012 (effective January 2013) with assistance from Deutsche Gesellschaft für Internationale Zusammenarbeit. The code is divided into three parts: general provisions, town planning, and development licensing (development control).<sup>13</sup>

Three types of urban or terrestrial planning documents are to be prepared:

- Regional rayon/administrative district plans ordered by SCUPA, approved by the Council
  of Ministers.
- Master plans of residential areas to include an individual plan for each of the 78 cities, ordered by the committee, approved by the Council of Ministers.
- Detailed plans of residential areas ordered by the Executive Power, approved by the Council of Ministers.

In addition, regional plans have been approved for 7 of the 10 economic regions. According to the new code, by-laws have been developed that transfer responsibilities for town planning to the Executive Powers and municipalities, although municipalities lack the capacity to undertake this task. As a result, in consultation with the Executive Powers and municipalities, consultants have been procured to prepare the plans with funds allocated from the state budget and with SCUPA coordinating the program at the national level. Of the 61 plans to be prepared under the program, a total of 42 have been ordered, of which 28 have already been prepared and approved and 14 are currently being prepared. The remaining 19 districts are to be completed by 2020. SCUPA is restricted to completing only four or five plans a year, primarily due to its limited human resources (it has only eight qualified urban planning personnel in total) and there is also limited capacity with *rayon* Executive Powers.

Town-planning activity is broadly defined by the code as "activities for determination of the directions of the total spatial concept of the territory or territorial lots of the Azerbaijani Republic and land-use, the planning, site development and the accomplishment of the territories, forming and development of systems of settlements, regulation of employment of the population, environmental protection, the historical landscape and monuments of history and culture."

Covering a 20-year planning period, the master plans assess population, economic growth, and infrastructure requirements, and cover residential, industrial, commercial, leisure, and other uses. The plans appear to adopt a relatively rigid and static land use zoning system, however, with a restrictive zoning classification of 12 defined use zones. Plan preparation requires public consultation as well as the approval of involved government ministries and other stakeholders. The most active are the Ministry of Ecology and Environment, the Ministry of Economy, and the utility providers.

#### **Summary**

- Azerbaijan has a very imbalanced distribution of urban development. Five million (53%) of the total 2015 population of 9.6 million are classified as urban, of whom 2.7 million are in Baku and the oil-rich Absheron Economic Region around the capital, which is 92% urbanized.
- All other regions are less than 50% urbanized and only two cities outside
   Absheron—Ganja and Mingachevir—have populations of more than 100,000.

# 2.5 Governance of Urban Development and Service Provision

Pre-independence, public service delivery was a responsibility of the state. The subsequent transition to a decentralized management, a market economy, and the privatization of land and property has, however, resulted in a potentially expanded role for the private sector and, following their establishment in 1999, municipalities were given an increasing responsibility in public service delivery. Notwithstanding this, however, urban development and public service delivery still fall primarily on the state.

The state takes the lead in public service delivery since, unlike municipalities, it has the structure and financial resources. Central executive bodies such as ministries, state committees of the Office of the President, and local state administrations manage and control public service delivery. They are financed from the state budget. Ministries, committees, and state-owned enterprises such as the major utilities are largely responsible for provision, investment, development, and management of most urban development and infrastructure services, including transport, water and sanitation, telecommunications, and energy. Services, such as education, culture, public health services, solid waste management, and other services, are carried out by the local Executive Powers at *rayon* level.

Since their creation in 1999, municipalities now have extensive, albeit theoretical, authority in public service provision. Legislation mandates them to adopt public service delivery programs and/or create municipal entities to deliver municipal services such as sanitation; water supply and sewerage; local transport and communication; solid waste disposal; and municipal housing and social services including education, health care, culture, and consumer services. Municipalities have autonomy in the method of public service delivery but standards are determined by the state. With the exception of some of the largest city authorities, however, the 1,607 mostly small municipalities that were elected in 2014 do not have the scale, capacity, or necessary financial resources at present to undertake provision

of anything other than the most minor of public services. The main exception is the state transfer of some of its housing and related communal services to municipalities. Even here, however, most state housing has been privatized to existing tenants, and municipalities have continued this process while retaining responsibility for communal servicing.

Local, foreign, or joint private sector companies may also deliver some public services on a contractual basis in sectors where they are not explicitly prohibited and provided that they meet state regulations. The role of the private sector is increasing in health care, education, and communications but, with the exception of transport and housing development in the largest cities, it still has no significant role in the provision, investment, development, or management of most urban development and infrastructure.<sup>14</sup>

#### **Summary**

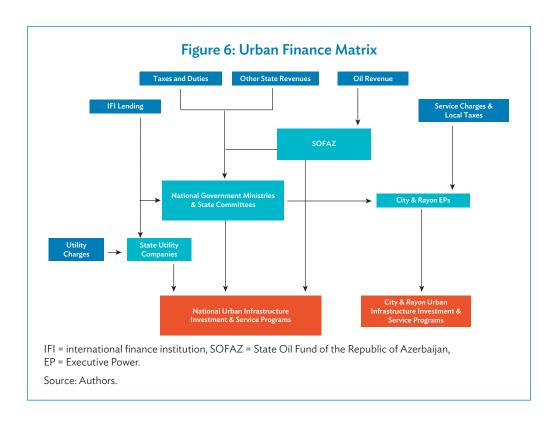
- The state takes the lead in urban service delivery. Ministries, state committees, and state-owned utility enterprises are responsible for the provision and management of urban infrastructure including transport, water and sanitation, telecommunications, and energy.
- Urban services such as education, culture, and solid waste management are provided by local Executive Powers of rayons appointed by the central government executive.
- Municipalities do not have sufficient scale, finance, or capacity to carry out urban service functions, and the role of the private sector remains limited in urban infrastructure investment.

### 2.6 Urban Finance Matrix

Unlike many developing member countries (DMCs), the Government of Azerbaijan has sustained strong fiscal capacity to meet the priority infrastructure and the social needs of urban development. As a result, national government and SOFAZ revenues and expenditures almost exclusively dominate the urban finance matrix. These are provided through direct budget allocations to the relevant ministries and state committees, Executive Powers of the *rayons* and cities, and the state-owned utility enterprises. Government financing institutions, private sector financial institutions, and municipal authorities have a limited role in finance for urban development and services. Revenues from local taxation and charges by both municipal authorities and state-owned utilities make a negligible contribution to capital expenditure. The only other significant contribution to urban development financing has come from the IFIs.

Figure 6 sets out the present finance matrix at the national, city, and *rayon* levels, identifying the main sources of revenue, funding, and spending agencies. Municipalities and private sector agencies are excluded from the matrix in view of the very limited role they play. In fact, in the 10-year period from 2005 to 2014, government expenditure grew from 18.0% of GDP to 30.4% in the first 6 months of 2014. In part, this approach reflects the traditions

Center for Economic and Social Development. 2015. Azerbaijani State Budget in 2016: Perspectives and Challenges. Baku.



of a centrally managed economy of the pre-independence period, but today it is an active economic policy choice to reinvest state revenues from oil and gas exploitation in the development of Azerbaijan's physical and human infrastructure.<sup>15</sup>

High and growing oil revenues in this period allowed the government to adopt ambitious public investment programs and social transfers. The World Bank's Country Partnership Strategy for Azerbaijan 2011–2014 notes that the government's expansionary fiscal policy accelerated rapidly in 2007 and 2008, with expenditures rising 181% over 2006. Government expenditure has increased since 2006 from approximately AZN3.8billion (21% of GDP) to AZN19.1billion (33% of GDP) in 2013. However, the government's large public investment program since 2006 has been crowding out non-oil private investment, including foreign direct investment, which dropped by over 50% as a percentage of GDP from 2005 to 2008. The large annual increases in government expenditures since 2005 have been made possible by substantial transfers to the government budget from SOFAZ (in addition to direct investment in public infrastructure and services by SOFAZ itself), which was established in 1999 to "ensure the accumulation, effective management, and use of income…related to oil and gas…for the benefit of citizens and future generations." <sup>16</sup>

With falling oil prices and revenues in the last 18 months, however, according to the review of the 2016 state budget by the Centre for Economic and Social Development, the expenditure of the state budget for 2016 is predicted to be AZN16.3billion, which is

<sup>&</sup>lt;sup>15</sup> In 1993, government expenditure was 30% of GDP.

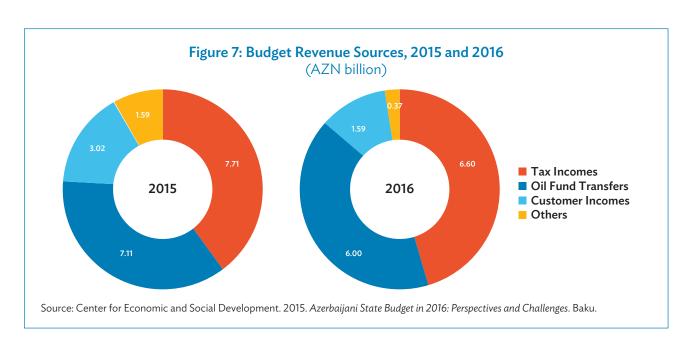
<sup>&</sup>lt;sup>16</sup> State Oil Fund of the Republic of Azerbaijan. 2010. SOFAZ Annual Report 2010. Baku. page 81.

AZN4.8 billion (22.9%) less than projected for 2015 (footnote 14). In 2016, AZN10.2billion (62.6%) of expenditure will be directed to current expenses and just AZN4.8 billion (29.7%) to capital expenditure. While current expenditure has declined by only AZN0.74 billion from its peak in 2015, capital expenditure is planned to decline by AZN4.51 billion from a peak of AZN9.38 billion in 2015—a decline of 48%.

In 2010, the World Bank's Country Partnership Strategy drew attention to the rapid rise in SOFAZ transfers to the budget as a cause for concern on three fronts:

- First, it indicated that government spending was becoming increasingly dependent (at least in the short to medium term) on oil revenues as opposed to generating higher levels of other sources of revenues, such as taxes.
- Second, by linking its fiscal policy to the global oil price cycle, the government runs the risk of exposing the economy to volatility.
- Third, it indicates that the government is opting to spend high levels of the oil revenue now instead of conserving the SOFAZ revenues for future generations.

In 2016, the contribution of SOFAZ to total budget revenue of AZN14.6 billion is projected at just AZN6.0 billion (41%) down from AZN7.11 billion in the 2015 budget (37% of AZN19.4 billion) (Figure 7). It has been an important policy objective to decrease the share of oil revenues in the budget total, a trend that is intended to continue until this reaches 25%–30%. This is expected to help protect the development of the economy from future oil and gas output and price shocks, while continuing to contribute financial resources in the future. However, the increase in the percentage contribution to falling budget revenues of the oil fund in 2016 highlights the difficulties of maintaining this policy despite significant reductions in government (particularly capital) expenditure.



From 2011 to 2015, the government's capital expenditure grew steadily from AZN7.9 billion to AZN9.4 billion before the current fall in the 2016 budget to AZN4.8 billion. The Center for Economic and Social Development analysis of the 2016 budget highlights levels and changes in expenditure which can be expected to impact on the urban sector including the following:

- Housing and communal services covering expenditure on water, sanitation, and housing services has changed little since 2011, comprising AZN374 million, or equal to 2.3% of total expenditure.
- Transport and communication spending has shown a high average annual rate growth of 33% from 2011 to 2016, but this has been revised downward from AZN120 million in 2015 to AZN114.8 million in 2016.
- Education is one of the few categories of expenditure that continues to rise, to AZN1.7 billion in 2016, but only AZN37 million (2.2%) of that is spent on higher education and AZN34 million (2.0%) on "first-vocational" education.
- Science expenditure has been rising steadily, but has now fallen back to 2013 levels at AZN131 million.

An analysis of national budgetary support to city and *rayon* Executive Powers (excluding the NAR Executive Powers) for 2015 indicates that, excluding Baku and Sumgayit, local expenditure totalled AZN1.3 billion, of which AZN0.5 billion (38%) was to be raised by the Executive Powers through local service charges and taxes, and AZN0. 8 billion (62%) from national government transfers. Four cities (Baku, Mingachevir, Sumgayit, and Shirvan) and two *rayons* (Absheron and Imishli) received no state support. Baku's special position as the national administrative and business capital, with a population of 2.2 million, contributes AZN6. 2 billion to the national budget. In addition, AZN298 million was allocated in subsidies to the NAR, but only AZN5. 2 million was allocated as state subsidies to all of the municipalities in Azerbaijan—an average of less than AZN3,250 per municipality.

In addition to the contribution of AZN6.0 billion (41% of total budget revenue) in 2016, SOFAZ also funds its own extensive program of investment in national infrastructure. Thus, in addition to the AZN10.4 billion transfer to the state budget, the 2015 SOFAZ budget approved more than AZN1.4 billion in expenditures on key national infrastructure and social development projects. These include the following projects:

- Improvement of the social conditions of refugees and IDPs (AZN150.0 million).
- Reconstruction of the Samur–Absheron irrigation system (AZN90.0 million).
- "Baku-Tbilisi-Kars" railway project (AZN111.5 million).
- State Programme on the Education of Azerbaijani Youth Abroad 2007–2015 (AZN44.1 million).
- Republic of Azerbaijan's share of the Southern Gas Corridor projects (AZN997.0 million).

In light of these trends and the current declines in total state expenditure, and in capital expenditure in particular, it is noted that the World Bank has already highlighted the importance of fiscal prudence given the significance of Azerbaijan's oil and gas revenues to the urban finance budget. While the government has seen fiscal surpluses in the recent past, oil production is now on a plateau, and revenues may be expected to fall as oil prices decreased by 50%in early 2015 and continue to fall even as gas output comes on stream.

In the medium term, fiscal revenues from oil and gas are expected to decline significantly in nominal terms and as a percentage of non-oil GDP, suggesting that the country may experience a severe fiscal adjustment at the end of its oil and gas boom.

While this could be mitigated with resources saved in SOFAZ (as reflected in the Long-Term Oil Revenue Management Strategy), the World Bank estimates that the nation is "already overspending relative to a permanent income approach." However, the World Bank goes on to state that, subject to careful investment review and prioritization—for example, by budget spending limits imposed following the most recent oil price falls—the country is expected to have the capacity to continue to support priority infrastructure and social needs and, indeed, it is these investments which will be important to enhance competitiveness. <sup>17</sup> Given the significance of direct government expenditure to the urban finance budget, the World Bank finds that there is also room for greater efficiency in the use of public funds and in the practices surrounding prioritization and mediumterm investment budgeting. In particular, the expenditure management system needs strengthening.

With regard to better financial sustainability, the government has expedited critical investments in network utilities (power, gas, water supply, fixed-line telecommunications) funded directly from the budget, while simultaneously pursuing financial viability through increases in tariffs (in some but not all cases to close to cost recovery levels), and the introduction of metering and billing systems and maintenance practices to ensure the sustainability of investment returns. However, to strengthen institutions, the government is gradually moving to corporatization and private participation, and it will be critical to continue and deepen these efforts.

In this context, the Asian Development Bank (ADB) has highlighted that greater opportunities for private sector development and public–private partnership are essential in transforming Azerbaijan's economy. Private sector development will contribute to economic diversification and inclusive growth by supporting non-oil businesses. ADB's private sector operations will therefore target individual banks and non-bank institutions to (i) promote rural financial inclusion by providing funding to financial institutions for on-lending to micro, small, and medium-sized enterprises (MSMEs) and farmers outside of the capital region; (ii) establish credit facilities for MSMEs; (iii) expand the housing mortgage market; and (iv) deepen leasing and insurance. ADB's participation will be instrumental in attracting commercial sources of credit, which normally take a cautious approach to projects in the region. In addition to the non-oil sector, ADB is examining opportunities in the extractive industries that would help Azerbaijan improve energy efficiency and reduce the impact on the environment.

World Bank. 2010. Country Partnership Strategy for Azerbaijan 2011–2014. Washington, DC.

<sup>18</sup> ADB. 2014. Private Sector Assessment (Summary). In Country Partnership Strategy: Azerbaijan, 2014–2018. Manila.

#### Summary

- Oil and gas revenues to government and the SOFAZ have sustained strong fiscal capacity particularly in the period 2008–2015 and dominate the urban funding through direct budget allocations to ministries, state committees, and stateowned utility enterprises.
- SOFAZ also directly funds urban infrastructure development.
- Local taxation and service charges make a negligible contribution.
- The only other significant contribution has been from the international finance institutions.
- However, steeply falling oil prices and revenues since mid-2015 have threatened this level of state urban investment, and the government's capital expenditure budget, which peaked at over AZN9 billion, is projected to fall.

# 2.7 Enabling Environment for Urban Competitiveness

Creating an enabling environment is key to developing urban competitiveness in a global economy. In 2006, in preparation for a review of Azerbaijan's Competition Policy Framework, ADB found that while Azerbaijan's overall economic policy had been fairly liberal in the transition to a market economy in the preceding 10 years, significant barriers still impeded the development of a sound, transparent, and competitive business environment, and that Azerbaijan remained fundamentally unattractive to foreign investors. A study by the United Nations Conference on Trade and Development ranked Azerbaijan 121st in foreign direct investment potential. Similarly, for corruption, Transparency International's 2003 report ranked Azerbaijan 95th out of 102 countries considered. At that time, however, it was apparent that the competition policy area in Azerbaijan was under review, and significant institutional and structural changes were proposed.

As a result, the World Bank reported that the progress made in improving the administrative and regulatory environment for business, including relaxing the rules for starting small and medium-sized businesses and creating a one-stop window for registrations, was reflected in Azerbaijan's ranking, improving to 97th among 158 countries in the *Doing Business 2008* survey. The World Bank's *Doing Business* report provides an aggregate ranking on the ease of doing business based on indicator sets that measure and benchmark regulations applying to domestic small to medium-sized businesses through their life cycle. In the *2016 Doing Business* index, economies are ranked from 1 to 189 by the ease of doing business.<sup>20</sup> For each economy, the index is calculated as the ranking on the simple average of its percentile rankings on each of the 10 topics included: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. The *2008 Doing Business* report showed improved system reliability, as businesses experienced a 20% reduction in power outages, and reduced sales losses by 40% compared with 2005

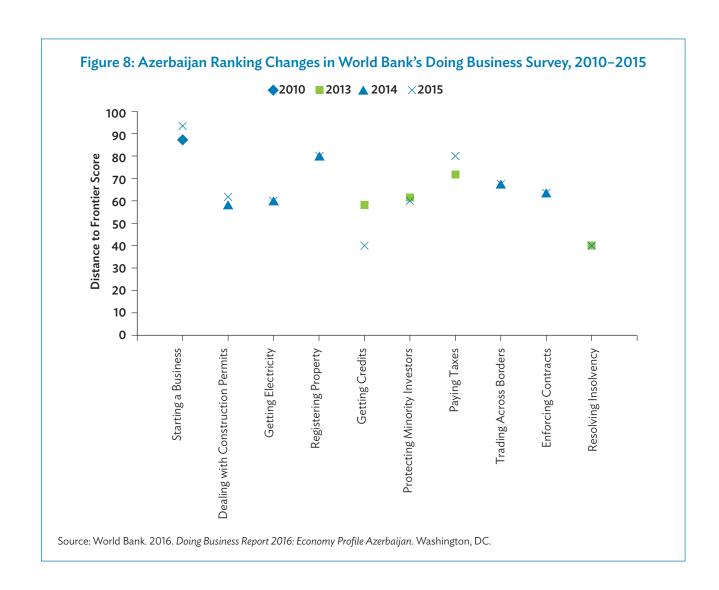
ADB. 2003. Technical Assistance to Azerbaijan for Development of a Competition Policy Framework. Manila.

World Bank. 2016. Doing Business Report 2016: Economy Profile Azerbaijan. Washington, DC.

survey results. Despite significant improvement in some areas, however, businesses and particularly SMEs continue to face many noncompetitive practices, particularly in imports and exports. During the following period, Azerbaijan's score in the *Doing Business* report improved more slowly, and Figure 8 shows how Azerbaijan's ranking has improved on the 10 indicators and overall in the period from 2010 to 2015.

The current *Doing Business* survey shows the breakdown of Azerbaijan's ranking of 69th among 189 countries in 2016. Figure 8 compares the nation's position on the 10 indices measured. Broadly, the results show a distinct pattern of progress on the main financial and legal indicators including the following:

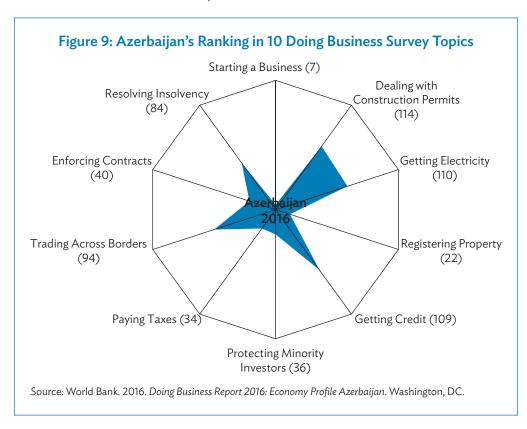
- Starting a business (ranked 7th worldwide in 2016).
- Protecting minority investors (36th in 2016).
- Paying taxes (34th in 2016).
- Enforcing contracts (40th in 2016).



Recent improvements were also achieved in the *Ease of Paying Taxes* (34th) and *Resolving Insolvency* (84th). In *Registering Property*, where major progress has been made in the registration cadastre and other support measures by the State Committee on Property Issues, Azerbaijan also performs well, ranking 22nd worldwide. In *Trading Across Borders*, the country now ranks at a median level of 94th, a significant improvement on being ranked 168th, performing poorly, however, on export time and costs. Significantly, Azerbaijan also performs poorly on two of the three urban development and service indicators: *Dealing with Construction Permits* (114th) and *Getting Electricity* (109th).

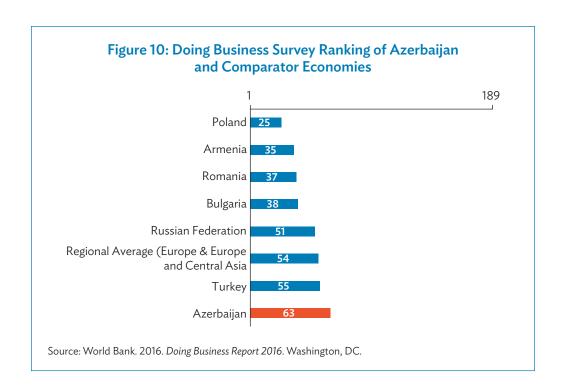
Based on the 2016 *Doing Business* index, at 63rd, Azerbaijan is ranked significantly higher than the median ranking of 95th. It also does relatively well on the cross-country business environment compared to many other countries in the Eastern Europe and Caucasus region (Figure 10).

On other global competitiveness indicators, Azerbaijan was 40th among 140 countries in the *Global Competitiveness Index 2015–2016* report released by the World Economic Forum in September 2015. Azerbaijan performed particularly well in the area of *macroeconomic environment* in which Azerbaijan was ranked 10th out of the 140 countries.<sup>21</sup> As a result, Azerbaijan remained the top-ranked country in the Commonwealth of Independent States (CIS) for the competitiveness of the economy. The *Global Competitiveness Report 2012–2013* also ranked Azerbaijan 46th out of 144 countries on market efficiency.<sup>22</sup>



See World Economic Forum. 2015. Global Competitiveness Report 2015-2016: Competitiveness Rankings. http://reports.weforum.org/global-competitiveness-report-2015-2016/competitiveness-rankings/

See World Economic Forum. 2012. The Global Competitiveness Report 2012-2013: p.13. Geneva.

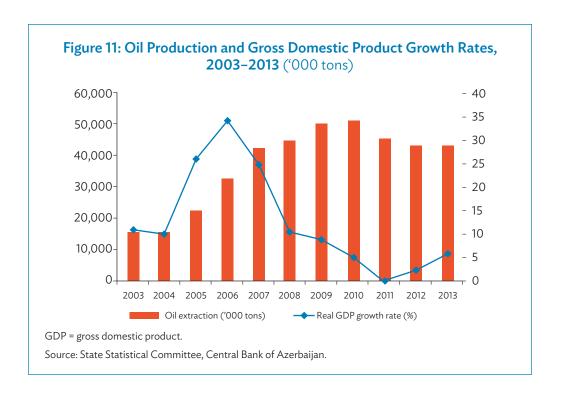


## 2.8 Competitive Base: Economic Profile

#### 2.8.1. Macroeconomic Performance

Rapid increases in oil production caused GDP growth to surge in 2006 and 2007, averaging 29.8% before dropping back to about 10% during the early part of that decade. Since 2011, however, vulnerability of the economy to oil production and price fluctuations has been more evident. Annual GDP growth fell to 0.1% in 2011, 2.2% in 2012, and after more than 5% growth in 2013, declined to 2.8% in 2014 (Figure 11). Growth was back up to 5.7% in mid-2015 but fell back to 1.0% by the end of that year—a result of the recent rapid decline in the world's oil price. ADB's GDP growth forecast for Azerbaijan has been revised downward to a  $\neg 1.0\%$  decline per annum for 2016, recovering to just 1.0% for 2017 as a result of lower oil production. The ADB Country Partnership Strategy (CPS) 2014–2018 notes, however, that the non-oil sector growth rates since the mid-2000s have been steadier than overall GDP growth rates, from nearly 8% to 10% from 2005 to 2013, with the exception of the 2009 recession year. Since 2010, non-oil GDP growth has been higher than oil GDP growth.

The Azerbaijan manat (AZN) appreciated from a 2006 revaluation exchange rate of AZN0.893 to \$1 (nominal rate period average) to a stable AZN784 from 2013 to early 2015. However, the rapid decline in the world's oil price in 2015 saw a major devaluation and floating in December 2015 to AZN1.55 to \$1, which has since recovered somewhat to AZN1.51 in May 2016. Inflation, as measured by the consumer price index, has also been volatile—reaching 20% in 2008, but receding to below 2% in 2009 as prices collapsed during the international financial crisis, and remaining in a 1.5%–4.0% range until the



end of 2015. With the December 2015 devaluation, however, inflation rose to nearly 14% and was at 10.8% in March 2016. Inflation since the mid-2000s has been driven by a combination of factors, principally oil prices, exchange rates, and the large fiscal stimulus.

The growth of hydrocarbon exports in the mid-2000s transformed Azerbaijan's current account balance—which had been negative from the 1990s to 2004—into large surpluses from the mid-2000s. The current account balance peaked at nearly 34.0% of GDP in 2008 and stood at 16.8% of GDP in 2013. Oil and gas exports comprised an average of 94.7% of total exports from 2006 to 2012 (based on current account balance data), amounting to \$30.7 billion in 2012. Azerbaijan has registered a trade surplus every year since 2004, and continues to accumulate large amounts of international reserves and maintain a relatively low external debt level. The debt level has remained low because of the oil boom and the government's decision to utilize oil revenues to finance investment projects and social spending.

#### 2.8.2 Sectoral Analysis

ADB's CPS 2014–2018 indicates that non-oil sector growth rates since the mid-2000s have been steadier than overall GDP growth rates, and since 2010, non-oil GDP growth has been higher than oil GDP growth. Since 2012, mining, which includes oil and gas, has constituted less than half of Azerbaijan's GDP, and in 2014, it was just 34.3%. Measured in gross value-added terms, the largest non-oil sectors in 2014 were construction (12.6% of GDP), retail and wholesale trade and distribution (7.9%), transport and storage (4.5%), and manufacturing (4.7%). Agriculture was about 16.0% of GDP in 2000, but by 2014 fell to only 5.3% (Table 2).

Table 2: Gross Value Added of Output by Economic Activities, 2017 (AZN million)

	2017		
	AZN (million)	%	
Agriculture, forestry, and fishing	3,949.3	6.1	
Mining	23,945.5	36.8	
Manufacturing	3,311.2	5.1	
Electricity, gas and steam production, distribution, and supply	714.7	1.1	
Water supply, waste treatment and disposal	115.8	0.2	
Construction	6,687.2	10.3	
Trade: Repair of transport means	7,305.2	11.2	
Transportation and storage	4,737.3	7.3	
Accommodation and food service activities	1,639.8	2.5	
Information and communication	1,138.2	1.8	
Financial and insurance activities	1,629.0	2.5	
Real estate activities	2,004.9	3.1	
Professional, scientific, and technical activities	921.7	1.4	
Administrative and support service activities	413.3	0.6	
Public administration and defense; social security	1,975.6	3.0	
Education	2,034.3	3.1	
Human health and social work activities	1,147.6	1.8	
Arts, entertainment, and recreation	594.4	0.9	
Other services activities	748.2	1.2	
Total	65,013.2	100.0	

Source: State Statistics Committee of Azerbaijan. 2018. National Accounts of Azerbaijan, Statistical Yearbook. Baku.

The modern high value-added service sector, however, remains underdeveloped. In 2013, the finance and insurance sector represented just 2.2% of GDP, and professional, scientific, and technical activities represented just 1.4%.

#### 2.8.3 Employment

Table 3 shows the numbers employed and the relative changes in percentage of total employment in all economic activity sectors during 2000–2014. Though its share in total employment has declined by 2% since 2000, employment in agriculture, forestry, and fishing has grown to nearly 1.7 million jobs, and is still the significantly largest sector of activity with over 37% of total employment. Despite its overwhelming contribution to national output, however, mining (including oil and gas extraction) employs only 42,000 people, which is less than 1% of total employment, a slowly declining share. Manufacturing employment has grown steadily since 2000: from 187,000 to 227,000 jobs, and maintaining a 5% share in total employment in 2014. Other large production sectors in 2014 were trade and distribution with 682,000 jobs (14.8%), and transport and storage with 185,000 jobs (4.0%).

Construction is the most rapidly growing sector of employment, growing from 189,000 jobs in 2000 to 334,000 jobs in 2014, now 7.3% of total employment. In the service sectors, the share of total employment in public administration and education has actually declined,

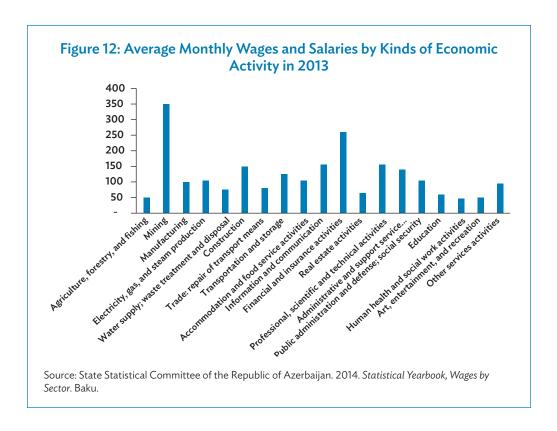
Table 3: Employment by Economic Activity Sectors, 2000-2014

	2000		2005		2010		2014	
	No.	0/	No.	0/	No.	0/	No.	0/
Agriculture, forestry	(000's) 1,509	<b>%</b> 39.1	(000's) 1,574	% 38.7	(000's) 1,655	% 38.2	(000's) 1692	% 36.8
and fishing			·		·			
Mining	41	1.1	42	1.0	42	1.0	42	0.9
Manufacturing	187	4.9	198	4.9	209	4.8	227	4.9
Electricity, gas and steam production, distribution and supply	25	0.7	28	0.7	31	0.7	30	0.6
Water supply, waste treatment and disposal	24	0.6	24	0.6	25	0.6	26	0.6
Construction	189	4.9	212	5.2	288	6.6	334	7.3
Trade: Repair of transport means	612	15.9	635	15.6	627	14.5	682	14.8
Transportation and storage	166	4.3	175	4.3	179	4.1	185	4.0
Accommodation and food service activities	20	0.5	25	0.6	47	1.1	56	1.2
Information and communication	29	0.7	32	0.8	56	1.3	59	1.3
Financial and insurance activities	16	0.4	18	0.4	24	0.6	33	0.7
Real estate activities	78	2.0	82	2.0	70	1.6	86	1.9
Professional, scientific and technical activities	40	1.0	43	1.1	46	1.1	59	1.3
Administrative and support service activties	27	0.7	39	1.0	47	1.1	54	1.2
Public administration and defense; social security	245	6.3	257	6.3	279	6.4	285	6.2
Education	331	8.6	345	8.5	350	8.1	367	8.0
Human health and social work activities	179	4.7	189	4.6	170	3.9	177	3.8
Art, entertainment and recreation	49	1.3	52	1.3	60	1.4	68	1.5
Other services activities	88	2.3	92	2.3	127	2.9	144	3.1
Total	3,856	100.0	4,062	100.0	4,329	100.0	4,603	100.0

Source: State Statistical Committee of the Republic of Azerbaijan. 2014. Statistical Yearbook, Industry of Azerbaijan. Baku.

and health and social work has declined absolutely by nearly 8,000 jobs to just 3.8% of employment. Modern professional service jobs in higher value-added activities, mostly in the private sector, have all grown significantly since 2000. In some cases, employment has doubled albeit from a small base—jobs in information and communication technology, finance and insurance, professional and scientific services, and administration and support services, however, still only comprise 4.5% of all employment.

Significantly, the pattern of employment in the primary agriculture and mining (oil and gas) sectors is reversed in terms of wage levels; agriculture has among the lowest monthly wage rates (half the average) while mining is the highest (three and a half times the average) (Figure 12). The majority of the workforce is actually engaged in low-



productivity and low-wage sectors. The decline in health and social work employment is partly explained by having the lowest wage rate of all sectors, at less than half the average. The rapidly growing but still small higher value-added activities, including information and communication technology, professional and scientific services, and administration and support services, are in the next highest group of salary earners at around one and a half times the average, while the small group of 30,000 employed in finance and insurance are the only group enjoying salary levels approaching the mining sector, at two and a half times the average.

#### 2.8.4 Spatial Distribution of Economic Activity

Data are limited on the spatial distribution of economic activity in the economic regions and *rayons*. Table 4 provides a breakdown of industrial output in works and services (at factor prices), and the total area under agricultural production by economic region in 2014. Industrial output is clearly dominated by Baku and the surrounding Absheron economic regions, producing AZN28.7 billion, or 92% of national industrial output. Only two other regions exceed AZN850 million: Aran, the largest region (AZN958 million), and the NAR. The "second city region" of Ganja–Gazakh, with an industrial output of AZN329 million (of which AZN190 million is produced in Ganja City), is the only other region exceeding AZN75 million worth of industrial output.

Aran, with nearly 700,000 hectares of agricultural crop production, comprises over 40% of the total national land area sown for agricultural production, which has increased substantially since 2000 (an increase of 32%). The north westerly regions of Ganja–Gazakh and Shaki–Zaqatala, which extend from Aran northwest to the Georgian border, are the other primary agricultural regions. Ganja–Gazakh has 192,000 hectares in agricultural

Table 4: Industrial and Agricultural Production by Economic Region, 2014

Economy Region	Industrial Production AZN million	Area Sown for Agricultural Production Hectares
Baku City	28,179.0	477
Absheron	543.8	3,105
Ganja-Gazakh	329.3	194,919
Shaki-Zaqatala	87.2	192,652
Lenkaran	71.0	117,344
Guba-Khachmaz	77.7	125,701
Aran	958.9	690,643
Yukhari Garabagh	23.9	119,940
Kalbajar-Lachin		4,104
Daghlig Shirvan	18.7	104,097
Nakhchivan	891.5	60829

Note: Data are from government statistics. By making any designation of or reference to a particular territory or geographic area, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

Source: State Statistical Committee of the Republic of Azerbaijan. 2014. Statistical Yearbook, The Agriculture of Azerbaijan and Industrial Production by Sector. Baku.

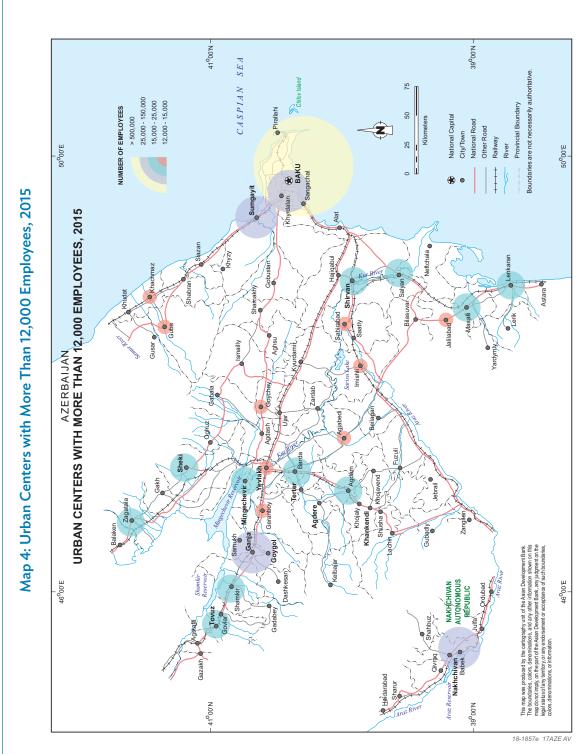
production while Shaki-Zaqatala has 194,000 hectares for the same purpose. The industrial regions of Baku, Absheron, and the NAR have limited agricultural capacity. The peripheral regions of Guba-Khachmaz and Lankaran have smaller, more balanced industrial and agricultural economies.

Map 4 shows the distribution of the 24 urban centers with more than 17,000 employees in 2015. These coincide largely with the main locations with over 30,000 in urban population, but contrast in size distribution. Baku is substantially the largest employment center, with only Sumgayit, the cluster of other industrial towns in Absheron, Ganja, and Nakhchivan City, having more than 25,000 employees. There are two other clusters of employment centers of 15,000 to 25,000 employees around Ganja in the northwest and south of Shirvan in the southeast.

Analysis of the nation's future regional economic development potential, together with the spatial distribution of existing and potential economic activity drivers, results in the emergence of functional economic regions (Map 5), which are different to the existing economic regions currently being utilized for accounting purposes. While this preliminary overview of existing and potential drivers requires detailed functional regional analysis, the National Urban Assessment (NUA) analysis and initial policy consultations identified the following needs and opportunities for urban development clusters and infrastructure investment to support regional development and diversification:

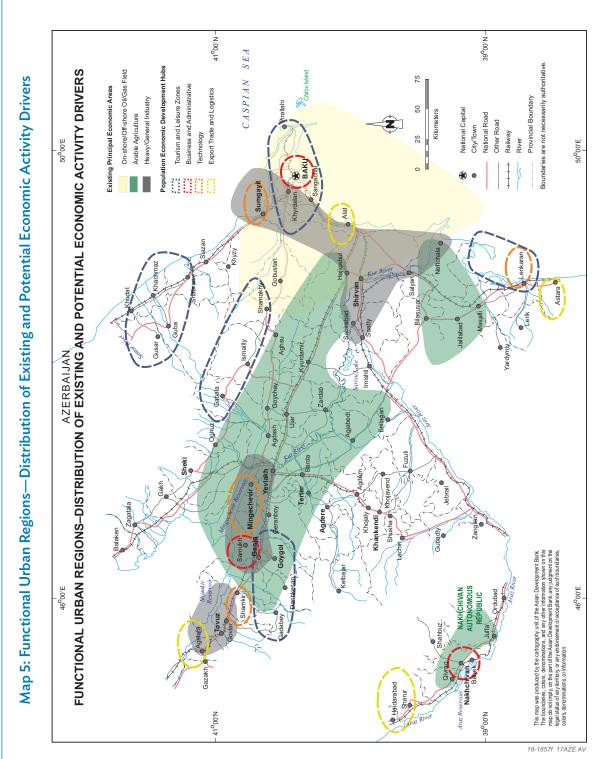
• The existing development of the Baku capital region and Absheron, driven by oil and gas production, servicing, and associated heavy industry, is already expanding toward the ports of coastal Aran and a cluster of urban centers around Shirvan, with the potential for new industrial service technology development.

<sup>... =</sup> data not applicable, AZN = Azerbaijan manat.



Note: Data are from government statistics. By making any designation of or reference to a particular territory or geographic area, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

Source: State Statistical Committee of the Republic of Azerbaijan. 2015. Statistical Yearbook. Baku.



Note: Data are from government statistics. By making any designation of or reference to a particular territory or geographic area, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

Source: State Statistical Committee of the Republic of Azerbaijan. 2015. Statistical Yearbook. Baku.

- To the south, the productive agricultural areas of the Lankaran region and the national
  parks of the southeast Aran region have potential for agribusiness, food technology,
  and tourism development serviced by the urban cluster of towns between Jalilabad and
  Lankaran, and for export trade and logistics development at the important transport
  corridor border with Iran.
- Khachmaz and Guba, and a scatter of smaller towns that together form a growing tourism cluster in the mountainous Guba-Khachmaz economic region in the north, which has benefited from a period of major investment into the Shahdag winter sports resort and the Guba international golf course near Gusar, close to the Russian border. Similar potential exists in the Upper Caucasus Mountains of Shaki-Zaqatala and Daghlig Shirvan regions but this would require investment in the road and rail corridors that serve them.
- Ganja, Shamkir, and Tovuz in the Ganja–Gazkh region and the towns of Mingachevir,
  Yevlakh, and Bardain the northwest part of the Aran Region, where together they
  form a significant urban concentration of towns within an 80-kilometer radius around
  Ganja, with a total population of over 700,000. As well as an important regional
  business, administration, and higher education function, this potential "second city"
  functional economic region could exploit technology, tourism, export trade and logistics
  development in the important Central Asia Regional Economic Cooperation road and
  rail transport corridors and its border with Georgia.
- Although there are no urban settlements with a population of over 50,000 in the central
  area of the nation's largest economic region of Aran,or in the adjoining Daghlig Shirvan
  region, this is the "agricultural heart" of the country with potential for agribusiness
  and food technology development, building on investments in rural information and
  communication technology.
- Similarly, the NAR is a strategically important agricultural, administrative, and service
  industry region with a high quality environment and potential for new technology and higher
  education-led development. Opportunities exist to build on its relatively unique export trade
  and logistics development links with Iran and at Azerbaijan's only border with Turkey.

#### 2.8.5 Economic Diversification Prospects and Policies

Before the current oil price crisis, in April 2012, the State Statistical Committee and the State Oil Company of Azerbaijan Republic announced the government's intention to prolong the duration of oil production and reserves by reducing extraction rates. It is evident from the above analysis that lower production levels or, currently, lower oil prices in the near future, will reduce oil revenues, restrain economic growth, and adversely affect government revenue and expenditures. ADB's CPS also expects that growth rates will be more modest over the medium term.

Thus, the drivers of growth will continue to move away from the oil sector toward the non-oil economy and, in a slower growth environment, it will be necessary to identify areas where rapid and sustainable employment generation is possible. However, non-oil economic growth will continue to be driven by public sector investments, which are, in turn, then threatened by the decline in oil revenues. For the development of the urban sector, the important economic issues include the following:

 There is a sustainability challenge in managing oil resources and revenues for future generations, while spending on the infrastructure needed to support diversification of the economy that would enable long-term, sustainable economic development.

- The government's current levels of annual increases in public expenditures rely on significant transfers from SOFAZ to the state budget. Given these limitations, the government will need to maintain macroeconomic and fiscal stability by moderating its expenditures in the short and medium term, and increasingly using SOFAZ transfers to finance large-scale projects to help reduce transfers in the long term.
- In trade, foreign direct investment, and macroeconomic policies, there is a need to maintain fiscal prudence and quality in public spending in line with the capacity of Azerbaijan to utilize funds efficiently and the capacity of the economy to absorb foreign exchange.
- Progress in economic diversification will depend on a variety of policy measures such as
  targeting sectors with high employment potential, removing barriers to entry, expanding and
  improving education and technical vocational and education training, improving accessibility
  and urban service infrastructure, and introducing measures to improve productivity.
- Creating a competitive non-oil economy will require economic changes in institutional arrangements including regulations and governance, and the capacity of public institutions.
- Social and economic policy reform is underway on health and primary education, but other areas such as financial markets, technology, goods markets, and higher education require more profound reforms.

#### **Summary**

- Overall annual GDP growth rates were 5%-10% from 2005 to 2014 but declined to 1% in 2015 following trends in oil production and prices. Non-oil sector growth has been more stable and is now higher than oil growth, and non-oil exports are expected to benefit from recent devaluations.
- Oil and gas now contribute less than 50% of GDP and employs less than 1% of the workforce.
- Non-oil growth sectors include construction, transport, telecoms, wholesale and retail trade, non-oil manufacturing, and agriculture.
- Employment distribution is concentrated in Baku and the Absheron Economic Region.
- There are clusters of urban employment centers with more than 15,000 employees around Ganja in the west and Shirvan to Lankaran in the south.

## 2.9 Inclusive Base: Equity Profile

According to the United Nations Development Programme (UNDP), Azerbaijan has become a "high human development" country. The UNDP's Human Development Index, a multidimensional assessment taking into account life expectancy, years of schooling, as well as gender equality and income, ranks Azerbaijan 76th out of 187 countries in 2014. Medium life expectancy at birth is 73.9 years. Azerbaijanis are expected to attend 11.7 years of schooling, and attend 11.2 years on average. The total Human Development Index value was 0.747 based on 2012–2013 data. Azerbaijan has integrated the Millennium Development Goals (MDGs) in key strategy documents. It has achieved MDG 1 to eradicate extreme poverty and hunger and is progressing toward MDG 2 (universal primary

UNDP. 2014. Human Development Report 2014 Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience

education), MDG 3 (gender equality and empowering women), MDG 4 (reducing child mortality), and MDG 6 (combat HIV/AIDS, malaria, and other diseases).

#### 2.9.1 Inclusiveness of Economic Growth

The World Bank's World Development Indicators 2013<sup>24</sup> estimates that Azerbaijan's Gini index,<sup>25</sup> improved by nearly 8% from 36.5 in 2001 to 33.7 in 2008 (latest data available). This is similar to Ireland, Greece, Switzerland, Belgium, the Kyrgyz Republic, and Poland, and compared favorably with the South Caucasus and surrounding countries of Georgia (42.1), Turkey (40.0), the Russian Federation (40.1), and Iran (38.3). It also ranks Azerbaijan well within a range that extends from Sweden (25.0) to South Africa (63.1) and significantly better than the United States (40.8), the United Kingdom (36.0), and the People's Republic of China (42.1). The mean income difference between cities and rural areas is also fairly small, with a Gini index of 33 for urban areas and 27 for rural areas.

ADB's CPS recognizes that key elements of inclusive growth have been seen in Azerbaijan since the mid-2000s. Inequality and poverty have declined since the oil boom with strong economic growth, a rise in wages, and the application of the SOFAZ to fund high public spending in the construction and service industries, essential infrastructure, and successful social protection measures. The social protection index increased from 0.174 in 2005 to 0.187 in 2009, mainly because of an expansion in social insurance and assistance.

ADB's CPS concludes that "the social protection system has been a major factor in contributing to poverty reduction and reducing inequality. The primary pro-poor social transfer programs are pensions and the well-regarded Targeted Social Assistance program, with the latter accounting for about 10% of social transfers and covering about 4% of the population. About 81% of poor households and nearly 93% of households in the lowest income decile received at least one type of social transfer." <sup>26</sup> The World Bank concluded that "the poverty rate would have been about 25% in the absence of social transfers... (however the) sustainability of the economic growth, the inclusiveness, and some of the factors that led to a substantial reduction in poverty (such as high levels of social transfers) are highly questionable because of the heavy reliance on oil" revenues.<sup>27</sup>

#### 2.9.2 Poverty Status

The welfare indicator used by ADB in Azerbaijan is per capita consumption expenditure. Each year, the amount of the general monthly subsistence minimum is established by law, which for 2016, was set at AZN136. In 1995, after independence from the Soviet Union, 68.1% of the population was living under the absolute poverty line. Since the early 2000s, however, Azerbaijan has been successful in reducing poverty on a number of indicators but still has to address the following issues:

• **Absolute poverty decreased.** According to State Statistical Committee data, there has been a dramatic drop in those living under the national poverty line from 49.0% in 2001 to 29.3% in 2005, 10.9% in 2009, and 5.0% in 2013.

<sup>&</sup>lt;sup>24</sup> World Bank. 2013. World Development Indicators 2013. Washington, DC.

<sup>&</sup>lt;sup>25</sup> The Gini index measures the extent to which the distribution of income within an economy deviates from a perfectly equal distribution. The higher the index the more unevenly income is distributed. A Gini Index of 1.0 would represent absolute equality of income; a Gini Index of 100.0 would represent absolute inequality of income.

ADB. 2014. Country Partnership Strategy: Azerbaijan, 2014–2018. Economic Analysis (Summary), para. 11, p. 3. Manila.

World Bank. 2010. Country Partnership Strategy for Azerbaijan 2011–2014. Washington, DC.

	000's Persons Women	% Women	000's Persons Men	% Men
Employed persons	2,226.8	48.4	2,376.1	51.6
Unemployed persons	138.2	58.1	99.6	41.9
of which registered unemployed	11.3	39.4	17.4	60.6
Economically active population	2,365.0	48.9	2,475.7	51.1
Unemployment rate	5.8	0.0	4.0	0.0
of which registered unemployment rate	0.5	0.0	0.7	0.0

Table 5: Employed and Unemployed by Gender, 2014

Source: State Statistical Committee of the Republic of Azerbaijan. 2015. Statistical Yearbook, Employment and Unemployment in 2014. Baku.

- Employment and poverty. The employment rate is very high for both men (96.0% of economically active) and women (94.2% of economically active), and 48.3% of those employed are women (Table 5). In 2013, the unemployment rate of Azerbaijanis was 4.0% for men and 5.8% for women. The majority of Azerbaijanis, however, work in low-paying sectors, and while Azerbaijan has experienced an overall growth in jobs, the quality of employment has decreased with 44% of the active population working in the informal economy, who have no social insurance system and are likely to face economic hardship in case of sickness and old age. Unemployment benefits are minimal and the registered unemployment rate is only 0.9% for men and 0.6% for women.
- Internally displaced persons and poverty. Azerbaijan has one of the highest per
  capita concentrations of internally displaced persons (IDPs) worldwide. According
  to the State Statistical Committee, 612,326 Azerbaijanis remain internally displaced,
  corresponding to 6.5% of the total population. Every third IDP lives in the Greater Baku
  area. In general, the displaced enjoy the same rights as other citizens, and sometimes
  preferential treatment. However, poor housing and a lack of basic services such as water
  and sanitation continue.

#### 2.9.3 Gender Status and Policy

Azerbaijan is in the middle rank in terms of the UNDP Gender Inequality Index.<sup>28</sup> It is near gender parity in areas such as education and literacy rates but there are inequalities in terms of women's public and political participation and in decision-making. The Gender Inequality Index also shows that Azerbaijan has an index value of 0.340, ranking it 76th out of 187 countries in the 2013 index.<sup>29</sup> In Azerbaijan, women hold 16% of Parliamentary seats. The Gender Inequality Index also shows that about 65% of women have reached secondary or higher level education compared with nearly 62% of their male counterparts. Female participation in the labor market is nearly 60% compared with 67% for men, higher than in other countries of the former Soviet Union. ADB's Gender Analysis carried out for the CPS in 2014 finds that three factors dominate gender relations in Azerbaijan: (i) the legacy of the Soviet policy on gender equality, where gender equality existed to some extent through quotas in political and economic representation; (ii) social and economic

<sup>&</sup>lt;sup>28</sup> The Gender Inequality Index (GII) is a composite measure, which captures the loss of achievement, within a country, due to gender inequality.

<sup>&</sup>lt;sup>29</sup> UNDP. 2013. Gender Inequality Index. In Human Development Report. New York.

difficulties of the transition period, exacerbated by the occupation of Azerbaijani territories; and (iii) traditional Azeri values and culture.<sup>30</sup>

ADB's Gender Analysis finds that the key outcomes for the status of women and for gender policy are the following:

- Policies and legislation to promote gender equality in Azerbaijan. Since the transition period, the government has shown strong commitment to gender equality in national legislation and international law. The State Committee on Family, Women, and Children's Affairs is the executive body charged with implementation of gender equality policies, and ministries and government agencies have assigned staff to be in charge of gender issues. A broad-based gender equality law, the Law of Azerbaijan on Gender (Men and Women) Equity Assurances, passed in 2006, prohibits gender discrimination in all forms and provides guarantees of gender equality in a broad range of spheres, including employment and remuneration. This includes provisions on gender equality in some key aspects of employment relations although not on pay. Other key legislation includes the labor code and laws on domestic violence, children's rights, women's empowerment and entrepreneurship, and on the loss of head of household. A national action plan for gender equity is also planned under Azerbaijan 2020: A Look into the Future.
- The State Program on Poverty Reduction and Sustainable Development, 2008–2015. The promotion and protection of gender equality is one of nine strategic goals of the State Program on Poverty Reduction and Sustainable Development (SPPRSD), and gender issues are prioritized in the labor market and employment, education, health, and IDPs and refugees sections. The SPPRSD targets an increase in the representation of women in decision-making bodies by 2015. The State Committee on Family, Women, and Children's Affairs, which maintains family support centers in all 11 regions, reports that in the recent municipal elections they promoted an increase in the number of women standing for election in one municipality from 4 to 26.
- Women's pay. The Gender Analysis draws on the European Bank for Reconstruction and Development (EBRD) Gender Equality Strategy, which reports that Azerbaijan has a large gender pay gap. In 2012, the average monthly wage for women was AZN243.60, or only 46.9% of the men's average monthly wage (AZN519.80).<sup>31</sup> The EBRD finds that this is the second largest gender pay gap among the 24 EBRD countries for which data is available, second only to Tajikistan. The biggest gender gaps are in mineral extraction, manufacturing, and transport, which enjoy higher wage levels, while women are concentrated in the lower-paid, public sector activities such as education (71.7% female in 2012) and health and social services (78.1% female in 2012). Women own only 10.8% of registered enterprises, which is low compared with a neighboring country such as Georgia (40.8%).
- Entrepreneurship and access to finance. ADBs Gender Analysis finds that according to the 2009 Business Environment and Enterprise Performance Survey, only 10.8% of 380 firms surveyed had female participation in the ownership, which is below the regional average for Eastern Europe and Central Asia (36%).<sup>32</sup> A total of 4.7% of the firms had a female top manager, significantly less than the regional average (18.9%).
- **Gender gaps in access to health and education.** Attendance of skilled personnel during childbirth and the provision of high-quality antenatal care are low (88%) in

ADB. 2014. Gender Analysis (Summary). In Country Partnership Strategy: Azerbaijan, 2014–2018. Manila.

EBRD. 2014. Strategy for Azerbaijan, Annex 7: Gender Equality. London.

World Bank. 2009. Business Environment and Enterprise Performance Survey 2009. Washington, DC.

comparison to other countries in the South Caucasus. Maternal mortality has improved but remains comparatively high within the region. Contraceptive use is low and the majority of women continue to use traditional methods. Only minor gender differences are reported for primary and secondary enrolment rates, and youth and adult literacy rates are all high. According to the State Statistical Committee, in the 2011–2012 academic years, 46% of females and 54% of males were enrolled in primary education, and 47% of females and 53% of males were enrolled in secondary education.<sup>33</sup> Gender parity was achieved in tertiary education.

#### **Summary**

- Inequality and poverty have declined with a strong social protection system and economic growth, with a small mean income difference between urban and rural areas.
- Internally Displaced Persons suffer a high level of poverty with lack of access to employment and basic services.
- Azerbaijan is near gender parity in education and literacy but is less equal in terms
  of women's empowerment and public decision-making, pay, and entrepreneurship.
- The government has shown commitment to gender equality in legislation and policy through the State Program on Poverty Reduction and Sustainable Development.

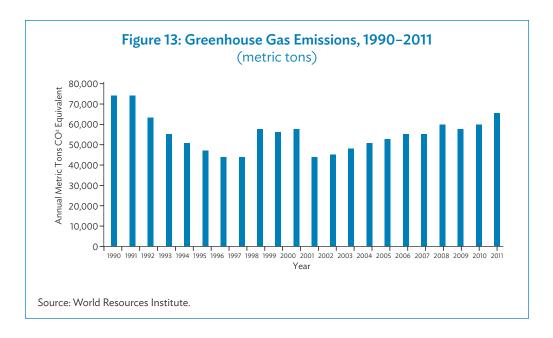
### 2.10 Green Base: Environmental Profile

#### 2.10.1 Climate Change

Azerbaijan is recorded to have relatively high climate change vulnerability regarding coastal areas, water resources, agriculture, energy, and ecosystems, and with medium vulnerability in forestry. Climate-induced changes are readily apparent, including temperature increases, river flow reductions and realignments, snowfall decreases, and receding snowlines. More extreme weather events are also predicted in the future, causing forest fires, flooding, landslides, and coastal erosion, negatively impacting on ecosystems, economic activities, and particularly on agriculture. Water distribution is uneven in Azerbaijan, and despite an overall decreasing trend in precipitation, mountainous regions in particular are enduring more frequent and intense flooding and mudflows during wet months, and water shortages during dry months. Floods and mudflows also impact the alluvial floodplains of major rivers, particularly the Kur and Araz rivers, where over 300,000 people are considered to be at risk. Precipitation is expected to reduce by over 15% this century, with more rainfall in winter and less in summer. Azerbaijan's glaciers are melting rapidly, having declined in volume by an estimated 50% over the past century. Deforestation is also a constraint as forests lose their carbon sink capacity.

Azerbaijan ratified the United Nations Framework Convention on Climate Change in 1995, and created the State Commission on Climate Change in 1997. In 2000, it ratified the Kyoto Protocol, and in 2001 established the Climate Change and Ozone Center within the Ministry of Ecology and Natural Resources. Azerbaijan is signatory to about 30 international commitments and conventions, and works closely with UN agencies and other donor agencies in climate-related matters.

<sup>33</sup> State Statistical Committee of the Republic of Azerbaijan. 2015. Statistical Yearbook. Baku.



#### 2.10.2 Greenhouse Gas Emissions

Greenhouse gas emissions in Azerbaijan in 2012 were recorded to be about 70 metric tons of carbon dioxide equivalent, and have steadily risen since 2001 (Figure 13).<sup>34</sup> Based on 2011 records, the energy sector was by far the greatest emitter of carbon dioxide equivalent, emitting around 75% of total emissions, followed by the agriculture and transport sectors (around 10% each), and with the waste and other industrial sectors cumulatively contributing about 5%. Data from the previous year (2010) indicate that Azerbaijan generates less than 0.2% of global emissions.

#### 2.10.3 Vulnerability

Ranking 93rd out of 172 countries in terms of natural disaster risk,<sup>35</sup> Azerbaijan is naturally prone to earthquakes, floods, droughts, and landslides. It is seismically active, and seismic hazards for the entire nation are classified as medium to high, with northern areas being classified as very high. Records indicate that there have been at least eight strong earthquakes in Azerbaijan over the past 200 years of magnitude 5.0 and above. Recent activity includes the Baku earthquake in November 2000 (magnitude 6.8), an earthquake in Zagatala Gakh in May 2012 (magnitude 5.6), and the east Azerbaijan earthquakes of August 2012, comprising two separate earthquakes (magnitudes 6.4 and 6.3) separated by a time difference of 11 minutes.

Northern and western areas of Azerbaijan are prone to landslides, particularly in mountainous areas. Causes of the landslides include seismic activity, excessive rainfall and glacial meltwater runoff, soil erosion, and instability caused largely by deforestation. With regard to flood hazards, although most rivers and tributaries are classified as medium hazard, a large portion of Azerbaijan's central and southeastern areas are classified as high

World Resources Institute. CIAT Climate Data Explorer.

<sup>&</sup>lt;sup>35</sup> As calculated by the United Nations University for Environment and Human Security.

hazard, largely being located within the drainage basin of the Kur River, the primary water source of Azerbaijan. This area is susceptible to severe flooding. In May 2010, heavy rains caused the flooding of 50,000 hectares of land across 40 districts and 7 regions. The floods submerged over 15,000 houses, destroyed more than 5,000, and displaced over 30,000 people. Azerbaijan is also reported to have recently emerged from a prolonged drought that will continue to damage crops and affect agriculture. According to the United Nations Framework Convention on Climate Change, droughts are likely to reduce water supplies in the nation by nearly one-fourth during the period 2012–2050.

Through government decree, the Ministry of Emergency Situations is the central executive government body responsible for protecting the population from natural and human-made disasters. It is mandated to organize and manage disaster response, rescue and rehabilitation activities, and is also responsible for fire security, construction safety, and civil defense. Its reconstruction support for the recent northwest Azerbaijan earthquake and the Kur River floods has been substantial, including new housing, social and infrastructure facilities, and utilities. The ministry also maintains a nationwide telephone hotline service to report natural and human-made disasters and events, personal illness, serious traffic and other accidents, chemical and hazardous exposures, and other events.

#### **Summary**

- Azerbaijan has relatively high climate change vulnerability particularly in water resources and receding snowline and glaciers.
- Greenhouse gas emissions have risen steadily since 2001 with 75% of emissions coming from the energy sector.
- The country is seismically active and naturally prone to earthquakes and landslides including three events of over 5.0 magnitude since 2000.

# 3 Urban Needs Assessment

### 3.1 Overview

A substantial portion of Azerbaijan's oil revenue surplus is directed toward infrastructure capital investments, transcending virtually all infrastructure sectors and touching all parts of the nation. Coupled with this are the increasing infrastructure needs from the urbanization processes at work in Azerbaijan; not only rapid in-migration into the Baku metropolis, but also steady in-migration into the over 70 intermediary cities from surrounding rural areas. These factors largely drive government's urban infrastructure strategy, particularly the enhancement of conditions and "livability" of cities by improving infrastructure services, rationalizing urban planning mechanisms, narrowing the urban-rural divide, and as highlighted by the World Bank, encouraging service sector development as the key economic driver. This section summarizes the status of the nation's urban infrastructure sectors, with the identification of key investment needs over the short to medium term.

### 3.2 Water Supply and Sanitation

The nation's total surface water resources of lakes, rivers, reservoirs and glaciers reportedly amount to a volume of 27 cubic kilometer (km³), which decrease to less than 20 km³ during dry years. About 70% of these water resources originate from outside Azerbaijan, with therefore only the balance (30%) originating from domestic sources. In total, the nation has 8,359 rivers, of which 171 are more than 25 km in length. The nation's two primary rivers, the Kur and the Araz, are heavily polluted, with the majority of the pollution apparently occurring prior to their entry into Azerbaijan. The nation also has 140 reservoirs, 450 lakes, glaciers in the Greater Caucasus, and significant groundwater supplies.

Azersu JSC, a centralized joint-stock corporation, provides the nation's potable water supplies and wastewater services. It is a full-service utility, involved in all aspects of water supply and wastewater provision, including sales, billings, and collection. It designs, constructs, and maintains its own intake structures, reservoirs, pump stations, pipelines, and sewer collectors, a system that currently includes over 18,000 km of water transmission lines and over 3,500 km of sewer and stormwater drains (photo on p. 44). With a total of 12,000 employees, it currently supplies potable water to over 1.3 million subscribers throughout the nation. Service provision is through two subsidiary companies: the *Baku Sukanal Department*, which is responsible for water and wastewater service provision in Baku, and the *United Sukanal LLC*, the largest component of Azersu, which is responsible for water supply and wastewater provision for other urban and rural areas nationwide. Two

additional subsidiaries are part of Azersu: the *Sutikinti Institution*, which constructs and rehabilitates water supply and wastewater systems, and the *Sukanal Scientific Research and Design Institute*, which completes engineering surveys, designs, and feasibility assessments, and performs technical research. The Institute has about 100 employees, including doctorate-level specialists. Azersu also has four training centers, one in the Absheron Peninsula and three in the regions of the country.

Azersu implements water and wastewater tariffs for residential and nonresidential consumers. Residential tariffs are divided into two categories: the cities of Baku, Sumgait, Khirdalan, and the Absheron administrative district and other administrative areas. In the first category, the current tariffs are AZN0.35/cubic meter (m³) for water and AZN0.15/m³ for wastewater, and in the second, tariffs are less for water (AZN0.30/m³), but the same for wastewater (AZN0.15/m³). Tariffs for nonresidential consumers are AZN1.00/m³ for water and AZN1.00/m³ for wastewater. Although tariffs have risen severalfold over the past decade, including an increase in May 2016, it is reported that they are still not yet sufficient to cover costs, resulting in continued reliance on state subsidies.

In line with Azerbaijan 2020: A Look into the Future's priority focus on e-based government, Azersu has introduced online services for consumers, who now have the ability to review and pay water and wastewater bills online and through designated e-terminals. It has also introduced prepaid smartcard metering technology, and in 2014, was able to install 140,000 such meters. Due to priority government funding and assistance from the international financial institutions (IFIs), Azersu has expanded water supply networks nationwide: currently about 95% of the population of Baku and 83% of cities and towns are connected to piped water supplies. Wastewater treatment provision, however, lags significantly behind water supply: sewerage networks serve only 78% of Baku's population and only 32% of the other cities and towns, and most of this



**Expanding the water supply network.** Azersu JSC is a full-service utility that designs, constructs, and maintains its own infrastructure, providing water supplies to over 1.3 million subscribers (photo by Azersu JSC).

This includes assistance from ADB, the World Bank, the Islamic Development Bank, and the Government of Japan. Azersu is also receiving assistance from Turkey, which is providing professional personnel technical assistance.

wastewater is reportedly discharged without treatment. Wastewater systems installed during the Soviet times are also reported as defunct. Azersu is, however, installing wastewater systems in selected communities, including centralized systems in urban areas, and smaller packaged systems in remote areas.

There is a need for further institutional reform and corporate restructuring of Azersu to continually increase its professionalism and improve its service efficiency and financial sustainability. Currently, reports indicate that it is overly dependent on state subsidies.

#### Key Investment Needs in Water Supply and Sanitation

- In a phased manner, introduce institutional reform for a corporatized management structure of the water utility company to reduce dependency on state subsidies, and improve service efficiency and sustainability of assets.
- Progressively identify, prioritize and develop centralized wastewater systems for unserved smaller towns and peri-urban areas.
- Explore and implement as feasible, small-scale, noncentralized sanitation systems for unserved rural areas.

## 3.3 Solid Waste Management

In contrast to the centralized, largely autonomous utilities engaged in other infrastructure sectors of Azerbaijan, solid waste management (SWM) services outside of Baku are primarily a responsibility of the Executive Powers and municipalities.<sup>37</sup> In most cities, these services are provided directly by the respective Executive Power, being characterized by door-to-door and community waste collection with direct disposal to largely unplanned and non-engineered dumpsites located nearby.<sup>38</sup> SWM services in peri-urban and rural areas are, however, a responsibility of municipalities although in reality, few municipalities have the capacity to even provide rudimentary SWM services to their populations.<sup>39</sup>

As a result, waste generated in many peri-urban and rural areas is not even collected in the first place, and wherever it is collected it also is dumped into nearby non-engineered dumpsites utilizing basic transfer vehicles. Although difficult to estimate, it is conceivable that the percentage of waste collected in these peri-urban and rural areas is less than 20%, with the balance (80%) being burned, buried, or discarded onto open areas by waste generators themselves. 40 Overall therefore, it is likely that outside of Baku, less than half of the nation's waste is currently being collected by municipal waste systems, and that practically all of the waste is dumped into open dumpsites that lack engineered environmental protection systems. These practices, therefore, have the potential to cause significant atmospheric, surface, and groundwater pollution, and other environmental

<sup>37</sup> The notable exception to this is the NAR, where SWM services are coordinated and directed at the state level.

<sup>&</sup>lt;sup>38</sup> In Azerbaijan, as in many nations for Central and West Asia, the translated word for waste disposal facility is "polygon."

Municipalities are mandated to provide SWM services, or alternatively, these services can be outsourced to private sector entities.

The exception to this is the NAR, where the government provides almost universal waste collection services throughout the NAR.

impacts, and also to threaten public safety and well-being. The photo (below) shows a typical city dumpsite: it is completely unlined, and lacks leachate and landfill gas control systems or any modern-day security or management systems.

Although variable, the average waste generation rate in Azerbaijan's cities is estimated at between 0.5 and 0.6 kilogram/capita/day, whereas rural waste generation is conjectured to be about 0.3 kilogram/capita/day. Also, although waste minimization is largely an unknown concept and commercial-scale recycling programs are yet to be implemented nationwide, a significant amount of source-based recycling is undertaken in certain rural areas through the diversion of food and other organic waste. Although regulations exist, regulatory enforcement is reported as weak to nonexistent, and tariffs, where they are applied, at \$0.15/capita/month comprise a largely insignificant share of costs.<sup>41</sup>

Fully recognizing this situation, the government has been actively planning sector reforms since 2011. This is currently manifesting in the formulation of Azerbaijan's first national SWM strategy, which is also closely linked to parallel, sequential sector investments that will provide SWM improvements nationwide. Through the Solid Waste Management Project for Intermediary Cities, ADB is assisting to formulate SWM systems in two strategically important regions; the exclave of the NAR, and the Lower Caucasus Economic Zone, which is a region in the west of Azerbaijan. The combination of the strategic direction provided through the national strategy and the parallel, targeted investment initiatives in each region are, therefore, planned to completely transform



**Solid waste management challenges.** Virtually all solid waste disposed of outside of Baku is dumped in open dumpsites and dumping grounds that lack engineered environmental protection systems (photo by Nicholas J. Allen).

The Law on Industrial and Domestic Wastes (1998, amended 2007) mandates municipal bodies to assure (i) the collection and disposal of municipal solid waste and industrial waste in their jurisdictions; (ii) that waste collection containers are provided for municipal solid waste, and regular collection and disposal is maintained; and (iii) that SWM facilities meet the requirements of national legislation and international standards.

National strategy formulation also includes the assessment and strengthening of institutional, legal, and regulatory frameworks for the SWM sector.

<sup>43</sup> ADB. Azerbaijan: Solid Waste Management Project for Intermediary Cities. https://www.adb.org/projects/46522-001/main.

Azerbaijan's SWM sector over the next decade. Baku has recently improved its SWM system, where it has developed a waste-to-energy facility, a material recovery facility, and is active in the promotion of SWM and environmental awareness through a joint-stock company, the *Tamiz Shahar JSC*.

#### Key Investment Needs in Solid Waste Management

- Approve and implement the national SWM strategy.
- Approve and implement the revised institutional, legal, and regulatory frameworks.
- Complete and implement the SWM sector investments in the five regions designated by the national strategy.

### 3.4 Transport

About 7% of Azerbaijan's gross domestic product (GDP) can be attributed to the transport sector, which is vitally important in enhancing regional development and economic progress. The sector consists primarily of roads, highways, and a rail network, with roads carrying the bulk of passengers, and rail carrying the majority of freight. The non-urban road network, which includes about 25,000 km of roads, is dominated by two highways: an east–west highway linking Baku to Georgia, and a north–south highway linking the Russian Federation to Iran through Baku. Road transport is growing rapidly<sup>44</sup> although for the most part, traffic accidents show a decreasing trend.<sup>45</sup> The private sector accounts for over 95% of passenger and freight road traffic services, with bus fares and freight charges being based on market conditions except for travel that incorporates cross-border travel, where the government sets the rates.

Although the road network includes 500 km of four-lane highway, it is insufficient to meet the nation's needs going forward. Also, although funding for road maintenance has increased dramatically, some of the network is in poor condition and deteriorating rapidly, reportedly being exacerbated further by vehicle axle overloading. <sup>46</sup> This reduces journey speeds, delays deliveries, and increases transport costs and accidents, constraining economic growth. Due to their relatively low populations, most cities are not experiencing urban transport issues common in other parts of Asia. Baku is the exception, however, where congestion occurs along many arteries and side roads, and disorganized on-street parking proliferates. There are also public transport issues in Baku: the Metro often suffers from severe crowding, impacting on safety and passenger comfort, and the lack of dedicated bus lanes can impede bus performance.

The rail network comprises about 2,100 km of track (1,270 km is electrified and 828 km is double-tracked), which transports about 4.8 million passengers and 22.3 million tons of freight annually. There are two predominant lines: a north-south line (211 km)

The number of vehicles increased 60% during 2005–2010. The number of cars in Baku has quadrupled since the early 1990s

<sup>&</sup>lt;sup>45</sup> Traffic accidents decreased from 3,179 in 2005 (1,065 fatalities and 3,668 injuries) to 2,890 in 2011 (1,016 fatalities and 3,031 injuries).

<sup>&</sup>lt;sup>46</sup> From \$5.7 million in 2007 to \$72 million in 2011.

extending between Baku and the Russian border to the north, and an east–west line (502 km) extending from Baku to Georgia and onto the Black Sea ports. <sup>47</sup> Due to the lack of investment, much of the rail infrastructure and rolling stock are in a deteriorated state, with large sections of track in poor condition and sections currently under speed restriction. In the absence of a major rehabilitation program, median train speeds could reduce in the medium term by 15 km per hour, and maintenance costs may increase by 20% annually. Major rehabilitation of the Baku to Tbilisi line is reportedly planned, however, as part of the Kars–Tbilisi–Baku regional rail project. The project, which has faced significant delays, is envisioned to directly connect Turkey, Georgia, and Azerbaijan, and provide an alternative transit corridor from Turkey to the economies of the Central and West Asian region. Although Azerbaijan has signed several international transport agreements that should improve cross-border and transit movements, surveys indicate that border movements are still inefficient, with delays of up to 3 days being reported. This is apparently due to nonharmonized border procedures; inadequate border crossing facilities; and to some extent, poor road conditions.

Azerbaijan has international airports located in Baku, Ganja, Lankaran, Zaqatala, and Nakhchivan City. The Heydar Aliyev International Airport in Baku is by far the largest and busiest airport, catering to over 20 international airlines and having served nearly 2.9 million passengers in 2013. It provides the hub for both Silk Way Airlines and Azerbaijan Airlines, the national carrier, which has a fleet of 30 aircraft flying to 22 destinations across the Commonwealth of Independent States (CIS), Asia, the United States, and Europe. Azerbaijan's primary maritime activity is the transport of cargo, oil, and oil products. The Baku International Sea Trade Port is the largest and busiest port in the Caspian Sea, and is an important transit point in Europe–Asia trade. Although the urban transport network of the Baku metropolitan area is relatively extensive and technically advanced, public transport systems of most other cities and urban areas of the nation are limited to rudimentary bus services and in certain cases, limited taxi services.

#### **Key Investment Needs in Transport**

- Completion of the proposed Kars-Tbilisi-Baku regional rail project.
- Potential to provide basic, lower-cost improvements to existing urban transport systems of selected cities. This could include for example bus prioritization, improved bus terminals, pedestrianization, and traffic management.

## 3.5 Energy

Azerbaijan has significant hydrocarbon resources, estimated at 7 trillion barrels of oil equivalent, and 48 trillion cubic feet of natural gas. In 2014, oil exports were around 43 million tons annually, dominating the national economy, when the energy sector alone contributed to over 50% of the nation's GDP. In parallel with the oil and gas sectors, the electrical power sector also contributes to the national economy. Following significant investment in power generation and transmission facilities (including a transition from oil-fired to gas-fired power plants), electrical power production now exceeds that of current national demand, reportedly resulting in the export of power to Turkey, Georgia, and the Russian Federation.<sup>48</sup> Paradoxically, however, the lack of investment in the nation's aging national electrical distribution grid over recent years has resulted in progressive declines in performance and increases in power outages that have particularly affected provincial areas. These deficiencies are becoming acute; unless distribution system investments are made imminently, the existing system will not be able to support regional needs and growth going forward.

Until recently, the AzerEnerji Joint Stock Company (AzerEnerji) was the state-owned enterprise responsible for Azerbaijan's entire power generation, transmission, and distribution networks outside of Baku (provided by Baki Elektrik Shebeke).<sup>49</sup> In this context, AzerEnerji operated and managed its own thermal and hydropower generation facilities, maintained over 100,000 km of transmission and distribution lines, and completed its own commercial transactions including consumer connections, metering, billings, collections, and customer support services. It had a complement of about 15,000 employees in 57 sales and technical offices across the network's seven regions. Its total electricity production in 2013 was 20.8 gigawatts, of which about 93% was from thermal and 7% from hydropower. It supplied power to approximately 1.45 million customers, 60% of whom are residential. AzerEnerji also implemented its own tariff, billings, and collection system that, through the utilization of prepaid metering and electronic payments, achieved an overall collection efficiency of 88% in 2013. The financial performance of AzerEnerji has, however, been marginal, requiring government budget support to fund its capital expenditure program, a situation that has been greatly exacerbated by the decline in distribution system performance.

As a result of substantial distribution network losses, the government unbundled AzerEnerji in February 2015, and transferred the nation's electrical distribution segment to a new utility, the Azerishig Open Joint Stock Company (Azerishig). This also included the transfer of assets, staff, and operations from the five regional distribution companies that had previously operated under the auspices of AzerEnerji. Azerishig is now, therefore, responsible for the operation and rehabilitation of the distribution network in all *rayons*, an initiative that will require considerable capital investment. As a result, the government plans to partner with IFIs to fund the planned investments, including potential support from ADB to the value of approximately \$1 billion through an initial conventional loan facility, followed by a multitranche financing facility. It is envisioned that this assistance will include upgrades

<sup>&</sup>lt;sup>48</sup> Planned completion of the installation of modern combined cycle gas turbine generation units in 2016 will reportedly improve generation plant availability from 54%to 75%.

<sup>&</sup>lt;sup>49</sup> Baki Elektrik Shebeke is the utility responsible for the purchase, transmission, and distribution of electrical power to Baku's 854,000 residential and 163,000 nonresidential consumers.

and expansion of the power distribution lines, substations and customer service lines, the replacement of meters, and capacity support to enhance the operation and financial performance of Azerishig.

Through support from government and IFIs, progress is also being achieved in the renewable energy subsector, where over the longer term, there is selective potential for wind, solar, and small-scale hydroelectric schemes. Azerbaijan has also adopted the *State Program for the Development of the Fuel and Energy Sector*, (2005–2015), which includes a series of additional key reforms.<sup>50</sup>

### **Key Investment Needs in Energy**

• Electrical power distribution system rehabilitation and expansion.

## 3.6 Telecommunications

Azerbaijan's telecommunications sector includes television, radio, fixed and mobile telephones, and the internet. Azerbaijan has a total of 47 television channels (4 public and 43 private), of which 31 are regional. Its national penetration rate is 99%. Cable television is becoming increasingly popular: in 2013, it penetrated 28% of households nationwide and nearly 60% in Baku. The nation also has 27 radio stations, mostly FM stations, and 4.35 million radios currently exist. Although Azerbaijan's fixed telephone system provides a reasonable level of coverage in certain areas, reports indicate, however, that there is a substantial waiting list from would-be consumers, and that although fixed-line services are available in major cities, many rural areas are poorly served. Fixed-line penetration is reportedly less than 20%. There are two fixed-line providers: the government-owned Aztelekom Production Association that provides national services, while another operator provides services in Baku and other designated areas.<sup>51</sup>

After many years of strong growth, driven largely by demand from the private sector and the growing middle class, the number of mobile subscribers in Azerbaijan was destined to reach 11 million in 2014. Three mobile providers dominate the market: Azercell with a 42% market share, Bakcell (30%), and Azerfon (23%). There has also been an unprecedented surge in internet usage, which doubled during the 2008–2012, reaching 5 million in 2012. By 2012, fixed broadband subscriptions reached 1.3 million, while by late 2013, mobile broadband users reached 4.1 million. Azerbaijan also launched its first telecommunications satellite in 2013. Overall, strong progress has been achieved in Azerbaijan's telecommunications sector, especially in public awareness and engagement in mobile phone, computer, and

These include the promotion of public-private partnership (PPP), transitioning medium-term tariff policy to promote full cost recovery, adopting accounting standards in line with International Financial Reporting Standards, enhancing the regulatory environment, and strengthening competition under a new competition law.

This is the Baku Telephone Communications Production Association, which covers the administrative territories of Binagedi, Garadag, Sabayil, Sabunchu, Surakhani, Narimanov, Nasimi, Nizami, Khazar, Khatai, and Yasamal districts of Baku city. Both Aztelekom and Baku Telephone Communications Production Association also provide high-speed internet services.

internet technologies that have grown in the face of relatively high costs in both technology hardware and tariffs.

The Ministry of Telecommunications and High Technologies is responsible for the regulation of the telecommunications sector. Recognizing the sector's strong focus on the nation's primary urban areas, the ministry now plans to prioritize rural areas, fully recognizing the larger social and economic benefits that can be gained from improved telecommunications. It is also implementing a major 4G internet/broadband initiative, with the objective of serving every household in the nation, originally to be funded from the Oil Fund. The ministry is also responsible for Azerpost, the government-owned national postal service.

### **Key Investment Needs in Telecommunications**

• Installation of 4G internet/broadband services in currently unserved urban, peri-urban, and rural areas.

## 3.7 Housing

It is estimated that in 2013, there were about 1.99 million private households in Azerbaijan. Azerbaijan m³, of which about 62% was classified as urban. The nation's housing stock is generally classified into two broad groups: existing housing and new housing estates. Existing housing is characterized by old estates constructed during the Soviet period in historical areas, estates built before World War II generally in rural areas, mass constructed prefabricated houses from post-war times, estates built after the war, and post-independence housing consisting of private cottage-type estates. New housing estates are generally multi-family complexes in the nation's major cities. Records indicate that about 80% of housing in Azerbaijan was constructed 40–50 years ago, of which about one-third is in need of substantial renovation. It is also estimated that about 600,000 IDPs lacked shelter following displacement after 1994, resulting in the construction of a substantial number of informal dwellings that lack documentation and were constructed on unsuitable, often unstable lands.

Since independence, the government implemented mass privatization of state-owned residential dwellings, primarily apartments, resulting in an estimated over 80% of the nation's total housing stock being privatized. Since its early years of popularity, the privatization program has waned; in 2009 only 2,300 dwellings were privatized, compared with over 40,000 in 1995. New house construction is dominated by private sector companies and cooperatives, which, until the recent global economic crisis, experienced a boom, especially in multi-family housing. Housing development has primarily been focused in the main cities and urban conurbations.

<sup>52</sup> United Nations Economic Commission for Europe Statistical Database for Europe. http://w3.unece.org/PXWeb/en.

Control and regulatory functions for the housing sector are shared between several agencies. The Ministry of Emergency Situations is responsible for national-level construction safety policy, and through direct intervention ensures that quality standards are met. The State Real Estate Registry Service is the central executive body responsible for the state registration of property rights. The State Committee on Urban Planning and Architecture (SCUPA) is the central agency that implements state policy and regulations in urban planning and architecture. Housing policies at the local level are administered by local executive agencies, while the municipalities are not directly involved in these processes. Of note, the government's Oil Fund is also heavily involved with housing sector funding, having also provided substantial investments in the construction of housing and social infrastructure for refugees and IDPs across different regions of Azerbaijan. The Ministry of Economy is also involved in the process of development and implementation of the state policies with the relevant state authorities in the area of housing-utility services.

This is through the State Agency of Control on Security in Construction.

Its responsibilities include the design and implementation of a unified real estate cadastre, conducting inventories, drafting land area plans, and ensuring that real values of construction are properly assessed based on their inventory and market position.

# 4 Urban Vision and Strategic Prioritization

## 4.1 National Urban Strategies

Azerbaijan has had in place three core national economic strategies and program priorities that have provided the national direction for urban development: (i) Azerbaijan 2020: A Look into the Future, (ii) the State Program on Poverty Reduction and Sustainable Development in the Republic of Azerbaijan for 2008–2015 and its predecessor (now effectively replaced by Azerbaijan 2020), and (iii) the State Program on Socioeconomic Development of Regions, 2014–2018.

# 4.1.1 Azerbaijan 2020: A Look into the Future and the Strategic Roadmap on the National Economy and Main Economic Sectors

In 2012, the government endorsed *Azerbaijan 2020:* A *Look into the Future*, a new vision document, which recommended the transitioning from a traditional economy to a knowledge-based economy, increasing the country's competitiveness, and diversifying the economic structure. Critically for urban and regional development, it also envisages economic diversification with expanded opportunities for citizens through non-oil sector development, combined with more balanced urban and rural development throughout the nation. This inclusive growth agenda consists of high social welfare; sustainable economic growth; broad opportunities and decent jobs for all; reduced regional inequalities; and, for remote villages, improved access to communication, health, education, and financial services. ADB's CPS highlights the importance of *Azerbaijan 2020* in setting development goals for the strategy that derive from the vision (footnote 48). These include the following:

- transitioning to a knowledge-based economy, with prioritized development of human capital;
- gross domestic product (GDP) per capita to more than double to \$13,000 by 2020;
- achieving an average of 7% non-oil GDP growth annually to 2020;
- raising non-oil exports to \$1,000 per capita by 2020;
- reducing regional inequality in quality of life, per capita production, and investment volume:
- forming "regional development centers" in cities and villages based on the competitive advantages of each region with the required infrastructure and social services; and
- achieving gradual minimum wage increases to achieve 60% of the average monthly salary.

Azerbaijan 2020 offers a clear vision for the nation in 2020, as summarized in Box 3.

#### Box 3: Azerbaijan 2020—A Synopsis of the Vision

#### By 2020:

- Azerbaijan will be an economically and politically developed and competitive country.
- Azerbaijan will be a place where the population's incomes are high, unemployment is minimum, human capital is highly developed, the environment is protected, and every citizen has broad opportunities.
- From an economic point of view, the Azerbaijan Republic will turn from the [South Caucasus] region's leading state into a highly competitive participant in the international system of economic relations.
- The modernization of the oil and gas sector and the petrochemical industry, the
  diversification and development of the non-oil industry...the development of the agrarian
  sector...expansion and development of trade and services and the improvement of the
  foreign trade and investment structure will be priority spheres.
- To achieve these goals, it is important to make full use...of the existing economic, social and political resources.
- From this point of view, it is planned to develop the energy, transport, transit and
  logistical infrastructure, to concentrate on the development of regions, to form regional
  development centers taking into account the competitive advantages of each region and to
  develop the infrastructure and social services in cities and villages.
- Within the framework of the current concept, the problem of "absolute poverty" will constantly be at the center of attention.
- To realize the targets stipulated by the concept, measures will continue to constantly improve the legislative base and strengthen the appropriate institutional potential.

Source: Abstract from "Azerbaijan 2020: A Look into the Future: Concept of Development" Report, Section 3. Azerbaijan 2020: Strategic View and Main Priorities.

Within the framework of this vision, a number of policy measures are emphasized (Box 4).

#### Box 4: Azerbaijan 2020—Key Policy Measures

- Toward a more competitive economy by
  - forming an economic model based on effective state regulation and mature market relations,
  - o improving the economic structure and the development of the non-oil sector, and
  - supporting scientific potential and innovation.
- Improving transport infrastructure.
- · Achieving balanced development of regions.
- Developing information and communication technology, and ensuring a transition to a knowledge-based society.
- Developing human and social capital including
  - health and health-care systems;
  - a modern education system including
    - universities as centers of education, research, and innovation;
    - industrial parks for higher education institutions;
    - nurturing specialists with knowledge and skills that meet the nation's socioeconomic development requirements;
  - improving the social security system;

#### Box 4 continued

- promoting gender equality and family development; and.
- developing youth potential and promoting sports.
- · Improving legislation and strengthening institutions.
- Developing civil society.
- Protecting and effectively managing cultural heritage.
- Protecting ecology and the environment.

Source: Development Concept "AZERBAIJAN - 2020: Outlook for the Future" approved by presidential decree in December 2012.

The Azerbaijan 2020 vision for diversification has been recently reinforced by a Presidential Order,<sup>55</sup> which sets the terms of reference for the preparation of the "Strategic Roadmap on the National Economy and Main Economic Sectors." The order sets up a high-level government and academic working group to steer preparation of "a new economic development strategy in order to ensure sustainability of the implemented economic policy and reforms." <sup>56</sup> Specifically, the group is charged with preparing a strategy and action plan to 2020 which will implement many of the objectives of Azerbaijan 2020, and go on to extend it with a new long-term vision to 2025 and a target vision for the period after 2025.

The focus of the Strategic Roadmap will be at two levels: a *national economy perspective* on the diversification of the national economy and a *sector perspective* for the accelerated development of eight key sectors which will deliver diversification, and guide public and attract private investment.<sup>57</sup> The following sectors identified in the roadmap correspond closely with the National Urban Assessment's (NUA) analysis of opportunity sectors with competitive advantages for diversified urban development:

- · oil and gas processing, including chemicals;
- · agriculture and agricultural products;
- small and medium-sized enterprise manufacturing of consumer goods;
- · heavy and mechanical engineering;
- · tourism and leisure;
- · logistics and trade;
- · affordable housing; and
- human resource development and training.

## 4.1.2 State Program on Poverty Reduction and Sustainable Development for 2008–2015

Prior to the endorsement of Azerbaijan 2020, the core program for urban and economic development was the State Program on Poverty Reduction and Sustainable Development (SPPRSD) and its predecessor, the Poverty Reduction and Sustainable Development Program (2004–2008). This previous program was specifically designed to increase employment

<sup>55</sup> The "Basic Directions of the Strategic Roadmap on the National Economy and Main Economic Sectors" was approved by Order of President of the Republic of Azerbaijan in 16 March 2016.

Order of the President of the Republic of Azerbaijan on Approval of "Basic Directions of the Strategic Roadmap on the national Economy and Main Economic Sectors" and related issues. March 16 2016. para. 3. Baku.

Its key focus is on national economic and sector development, emphasizing economic diversification more than Azerbaijan 2020's geographic diversification objectives. It will have an important impact on urban development and functional urban regional development, primarily through the sector perspective on the development of eight key sectors.

levels, improve living standards through sustainable development of the non-oil sector, ensure balanced regional development, improve communal services and infrastructure facilities, create jobs, and establish new enterprises. Subsequent to this, the SPPRSD was closely aligned with delivery of the Millennium Development Goals (MDGs) with emphasis on inclusive growth, poverty reduction, infrastructure development, environmental sustainability, job creation, social protection, education, private sector development, good governance and capacity development, gender equity, and knowledge solutions.

Aligned with other state programs, the SPPRSD utilizes a participatory and monitoring process that involves government, international organizations, and civil society. It has nine strategic goals (Box 5). To achieve the strategic goals, the measures to be implemented from 2008–2015 are classified under four functional groups:

- · macroeconomic stability and economic growth,
- employment policy and social protection of the population,
- · human development and social progress, and
- · institutional policy and good governance.

The primary sources for financing for the program are the state budget, State Oil Fund of the Republic of Azerbaijan (SOFAZ), and the State Social Protection Fund.

# Box 5: State Program on Poverty Reduction and Sustainable Development Strategic Goals

- 1. Ensure sustainable economic development by maintaining macroeconomic stability and balanced development of the non-oil sector.
- 2. Increase income-generating opportunities and achieve a substantial reduction in numbers of the poor.
- 3. Reduce social risks for old-age groups, low-income families, and vulnerable groups by developing an effective social protection system.
- 4. Continue systematic implementation of activities aimed at improving the living conditions of refugees and internally displaced persons.
- Improve the quality of and ensure equal access to affordable basic health care and education services.
- 6. Develop social infrastructure and improve public utilities.
- 7. Improve and ensure sustainable management of the environment.
- 8. Promote and protect gender equality.
- 9. Continue institutional reforms and improve good governance.

Source: State Program on Poverty Reduction and Sustainable Development for 2008-2015 (approved by presidential decree on 15 September 2008).

## 4.1.3 State Program on Socioeconomic Development of Regions, 2014–2018

There have been several generations of the State Program on Socioeconomic Development of Regions (SPSDR). The objective of the first program (2004–2008) was to increase employment levels, improve living standards through the sustainable development of the non-oil sector, improve communal services and infrastructure facilities, create jobs, and establish enterprises. Although this program and the succeeding program (2009–2013) were designed to promote balanced regional development, the overall objectives were largely focused on national economic development.

During implementation of these programs, 240 decrees were passed to accelerate the socioeconomic development of cities and districts in economic regions. The achievements of this policy pursued during the 10-year period to 2013 was largely expressed in terms of rapid development of macroeconomic indicators: GDP increased 3.2 times, per capita GDP increased 2.8 times, the non-oil sector rose by 2.6 times, and average annual growth in the country reached 12.8%. In practice, however, most of this growth was driven by investment and urban development in Baku and the Absheron Economic Region, rather than in the other regions.

The current SPSDR (2014–2018), which was prepared after completion of *Azerbaijan 2020* and draws from it, is largely a continuation of policies directed at economic diversification and non-oil sector development, but now more explicitly targets regional development, stating:

"[The] rapid development of regions, in particular, further improvement of infrastructure and social services related to rural development....and such important tasks ... as infrastructure provision in regions, including provision of population with public utility services; boosting the development of entrepreneurship aiming at export-oriented and competitive production; raising employment level and reducing poverty level of population, especially, of rural population."58

SPSDR (2014–2018) also emphasizes that macroeconomic stability is crucial for the achievement of the goals of the state program. It underscores that the non-oil sector, as the primary source of economic growth, budget, and currency income, will continue its role as a strategic factor in achieving balanced and sustainable development and a high-income economy. SPSDR (2014–2018) confirms that the following activities will be continued through the 2014–2018 period as key conditions "for [the] development of the whole economy, including development of individual sectors in regions:"<sup>59</sup>

- Maintain the average annual inflation rate and exchange rate at acceptable levels.
- Set taxes and customs rates at optimal levels.
- Continue measures to stimulate agricultural producers and increase wheat production.
- Stimulate export-oriented activities.
- Stimulate the creation of new jobs.
- Raise the share of budget revenues from the non-oil sector in GDP.

The main priorities of state investment policy for the regions in the 2014–2018 period are as follows:

- investment in the non-oil sector for development of the regions,
- · prioritization of "modern development trends" in regional investment policy,
- strengthening social investments,
- prioritizing human capital and infrastructure investments,
- prioritizing state investments in nanotechnology and the "low-carbon" sector,
- attracting domestic and foreign investments in priority sectors including export-oriented and value-added sectors, and
- attracting domestic and foreign investments for emerging industrial parks.

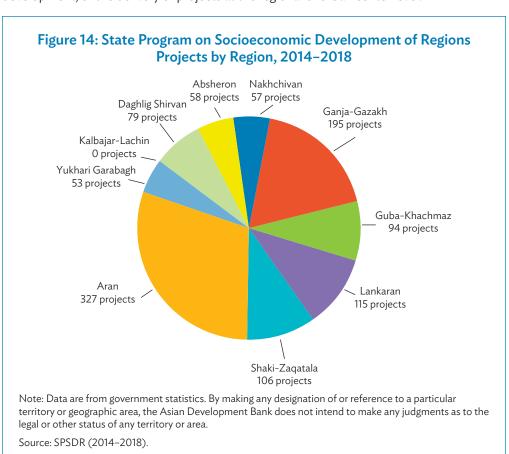
Decree of the President of the Republic of Azerbaijan. 2014. State Program on Socioeconomic Development of Regions, 2014–2018, Section 2, p.9. Baku.

Decree of the President of the Republic of Azerbaijan. 2014. State Program on Socioeconomic Development of Regions, 2014–2018, Section 2, p.9. Baku.

Other priority sectors and measures that are expected to support regional development include the following:

- entrepreneurship development,
- · development of agriculture,
- · development of information and communication technologies,
- tourism development,
- · development of the housing and public utilities,
- development of transit and transport services,
- social protection of the population,
- · educational investment,
- health-care services,
- · youth and physical culture and sport investment, and
- protection of cultural heritage.

SPSDR (2014–2018) also includes national economic development projects and measures located in the relevant economic regions and *rayons*. An analysis of these by region (Figure 14) indicates that, by number of projects at least, the program is now significantly more regionally focused including projects in the regions of Aran (30%), Ganja–Gazakh (18%), and Lankaran (11%), each region having significant economic development potential. The program is not, however, based on a clear regional strategy or plan, has no urban prioritization strategy nor does it provide for necessary institutional capacity for plan development, or the delivery of projects at the regional or urban center level.



## 4.2 Urban Vision and Strategy Priorities

# 4.2.1 Urban and Regional Economic Development: Past Achievements, Future Challenges

As presented previously, economic development outturns in Azerbaijan have been high for virtually all indicators for the period 2004-2013, with an average annual growth rate of over 10% that has only slowed in recent years as a result of the oil price downturn and the resulting fall in government and SOFAZ investment. As oil and gas output and revenues are projected to decline substantially over the next 2 decades, the government's focus has progressively shifted over the past decade to developing a diversified, nonoil economy that is more equitably shared throughout the nation's regions. This is now clearly reflected in the vision set by Azerbaijan 2020 and the Strategic Roadmap on the National Economy and Main Economic Sectors and is being pursued in the SPSDR, in SOFAZ, and in ministry and state committee investment programs. To date, the growth of output, wages, and private investment has been heavily concentrated in the oil and gas sector, even though the sector employed less than 1% of the economically active in 2013. Since 2005, employment growth of around 100,000 jobs has occurred in each of the construction, manufacturing, and agriculture sectors, and albeit from a very small base, a growth of around 25,000 to 50,000 jobs has been achieved in a number of modern service sectors, mostly situated in Baku. 60 However, there has been scant employment creation in other knowledge-based sectors such as hardware and software technologies, higher education and research, value-added manufacturing, the creative industries, and professional and scientific services.

Regionally, the growth and distribution of both the urban population and urban employment is heavily skewed. Baku and the Absheron Economic Region have a combined population of nearly 2.7 million, whereas, apart from Ganja (population of 0.32 million), the populations of the nation's other cities are 100,000 or less. <sup>61</sup> This urban growth pattern has been market-led by Baku's oil sector.

The capital expenditure program is, however, delivered almost exclusively by the central government through its ministries, state committees, state-owned utilities, and government-appointed city and *rayon* Executive Powers. With the exception of the Nakhchivan Autonomous Republic (NAR), there are no administrative or governance structures at the regional level, and although institutions now exist at the municipal level, their capacity to plan, fund, manage, implement, and monitor urbanization and urban development processes is severely constrained by their small scale and limited financial resources. Needs for improved regional and municipal institutional capacity are further highlighted by the substantial future population growth, and increased urban service demands envisioned for virtually all of Azerbaijan's towns and cities. Based on the NUA urban profile and needs analysis, Box 6 summarizes the four key NUA strategy drivers.

These service sectors include finance, ICT, and other technology services.

This includes Sumpayit with a population of around 0.33 million.

#### Box 6: Key National Urban Assessment Strategy Drivers

Azerbaijan 2020 and the Strategic Roadmap:

- Diversification: toward a non-oil economy through investment in eight key sectors
- Regionalization: toward balanced regional and urban development

Address infrastructure investment challenges:

- High levels of government- and SOFAZ-led investment in urban infrastructure
- Declining oil and gas revenues, resulting in declining infrastructure investment from 2015

Regionally balanced urbanization to address current imbalances:

- Baku City and Absheron Region population is 92% urbanized; all other regions are 25%-50% urbanized
- A total of 25 of the 30 largest cities and rayons have urban populations of less than 100,000

Strengthening institutional coordination and delivery mechanisms:

- Building on strong and well-resourced national and city/rayon governments
- Building technical and human capacity in smaller cities and rayons
- · Addressing weak and poorly resourced municipal government
- Consider potential public-private partnership models for urban investment

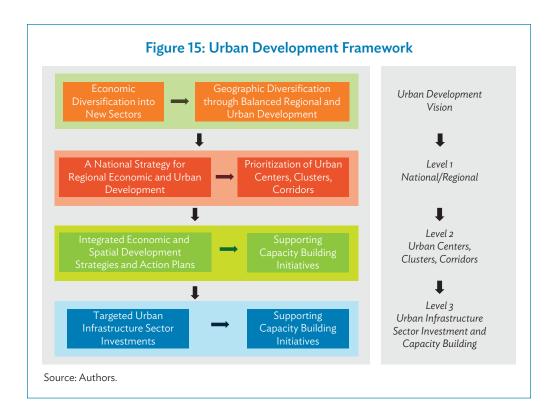
Source: Azerbaijan 2020 Outlook approved in 2012 and Set of Strategic Roadmaps approved in 2016.

Azerbaijan's economic future, therefore, depends on its ability to successfully transition toward a non-oil, knowledge-based, inclusive economy over the medium term. This in turn requires diversification on two main fronts: economic diversification into new sectors and geographic diversification through balanced regional and urban development. This encapsulates the vision and objectives of the government as elaborated in Azerbaijan 2020 and the strategic roadmap, and forms the basis of an urban development strategy for the Azerbaijan NUA.

# **4.2.2** The Urban Development Strategy Framework: A Three-Level Approach In this context, the findings of the NUA suggest that, broadly, a three-level approach to formulating an urban development strategy is now required to successfully deliver the following transition:

- National strategy for regional economic and urban development. This is required to guide the sustainable development of each of Azerbaijan's economic regions, based on their individual and unique competitive advantages, and identify and prioritize regional development centers, clusters, and corridors.
- Integrated economic and spatial development strategies and action plans. These are for prioritized urban development centers and clusters and are required together with the capacity strengthening of city and *rayon* Executive Powers and other local institutions to ensure that they are capable of managing urbanization and delivering urban services.
- Priority targeted urban infrastructure sector investments and supporting capacitybuilding initiatives. These can be designed and implemented at the national, regional, and local levels in order to meet the urbanization demands of the future.

Figure 15 presents this approach graphically, showing how the urban development vision can be delivered by action at three levels of intervention.



# Level 1: A National Strategy for Regional Economic and Urban Development

Azerbaijan 2020 envisages economic diversification and a transition to a knowledge-based economy based on clear regional development objectives, including the formation of regional centers in the regions beyond Baku and Absheron to maximize the competitive advantages of each and reduce regional inequalities. This also aligns closely with the objectives of SPRSD (2014–2018), but this program does not, however, include an active regional economic strategy. Consequently, there is no integrated economic and spatial regional and urban development vision, and no strategy nor any action plans for Azerbaijan's regions or regional centers. A National Strategy for Regional Economic Development together with action plans to support the delivery of the aspirational vision of Azerbaijan 2020 therefore is crucially required.

It is essential, therefore, that analysis of the natural comparative advantages of clearly defined "functional economic" regions, clusters of urban centers, or corridors of infrastructure or economically linked towns and areas is carried out to identify self-sustaining, endogenous regional economic and spatial development opportunities. This initiative could incorporate the following activities:

Utilizing the introductory NUA analysis as a basis, further evaluate the functional
economic areas of the nation's regions to identify economic development planning
regions that maximize the competitive advantages of each region and reduce regional
inequalities.

- On this basis, prioritize urban centers, clusters, and corridors for the preparation of modern, integrated city and urban development strategies and action plans.
- Examine existing legislative and regulatory frameworks relating to regional development, and identify institutional tasks and activities necessary to integrate economic development and spatial planning at the regional level.

An analysis of the nation's future regional economic development potential together with the spatial distribution of existing and potential economic activity drivers, as outlined in section 2.8.4, suggests the emergence of functional economic regions (Map 6), which are different to the existing Economic Regions used for presenting statistical data, including opportunities such as the following:

- A cluster of urban centers within the vicinity of Ganja, Shamkir, and Tovuz in the Ganja–Gazkh region, and Mingachevir, Yevlakh, and Barda in northwest Aran Region. As well as an important regional business, administration, and higher education function, this potential "second city" functional economic region can also exploit technology, tourism, and export trade and logistics development.
- An "export trade and logistics" corridor in areas such as the Lankaran Economic Region, linked to the increasingly important transport corridor border with Iran, or in the west of the Ganja-Gazakh region at the important Central Asia Regional Economic Cooperation road and rail transport corridor and border with Georgia.
- A "mountain-to-sea" tourism and leisure cluster in a scatter of smaller towns that
  together form a growing tourism cluster in the mountainous Guba-Khachmaz
  economic region in north. This area has benefited from a period of major investment
  into the Shahdag winter sports resort and the Guba international golf course near Gusar,
  close to the Russian border.
- A "rural development" region, founded on the growing agricultural base of the
  central Aran and Daghlig Shirvan regions. The regional focus would be on developing
  agribusiness and higher-value food production in the region's small towns; cooperative
  farm-to-market micro, small, and medium-sized enterprise (MSME) development;
  agritourism; and promoting e-business and investment in rural telecommunications.

# Level 2: Integrated Economic and Spatial Development Strategies and Action Plans

A National Strategy for Regional Economic Development will prioritize urban centers, clusters, and corridors in Azerbaijan, for which modern city and urban area development strategies and action plans can be prepared. These will integrate economic and spatial planning in order to deliver on the diversification and regionalization vision for urban development. The preparation of development strategies and action plans is an opportunity to provide technical assistance to (i) identify and prioritize urban centers, clusters, and corridors; (ii) support the preparation of urban strategies and action plans; (iii) carry out sector assessments, including sector roadmaps and investment plans; (iv) strengthen local institutional capacities; and (v) identify priority infrastructure projects to a stage where they can be financed by international financial institutions or attract private investment. Technical assistance should also include action plans as a concrete product to support the delivery of the vision and strategy and enable improved technical, legal, and financial design of projects.

For effective strategic action on diversification and regionalization, it will be important to focus on a limited number of urban centers, clusters, or corridors of cities and smaller towns that

provide a "critical mass" of economically active population, economic activity, and efficient urban service potential. The initial analysis of urban activity drivers for the NUA exampled in Map 6 suggests the potential of urban clusters or corridors around the following:

- The expansion of the corridor from the ports of coastal Aran to a cluster of urban centers around Shirvan driven by heavy industry development servicing the oil and gas production sectors and with the potential for new industrial service technology development.
- The southeast Aran and Lankaran regions have potential for agribusiness, food technology, and tourism serviced by an urban cluster of towns between Jalilabad and Lankaran.
- A scatter of smaller towns that together form a growing tourism cluster in the Upper Caucasus Mountains of Shaki–Zaqatala and Daghlig Shirvan regions but would require investment in the road and rail corridors that serve them.

The potential "second city" functional economic region of Ganja, Shamkir, and Tovuz and the towns of Mingachevir, Yevlakh, and Barda, which form a significant urban concentration of towns within an 80-km radius around Ganja with a total population over 700,000. This is a cluster that has sufficient scale to exploit technology, export trade and logistic development, as well as expand existing important regional business, administration, and higher education functions.

The implementation of urban development and the delivery of most urban services at the local level is carried out and funded through the Executive Powers appointed by national government or by regional or local offices of the national state owned enterprises for water, power, and telecommunications. Even key urban administration functions such as master planning and land registration, acquisition, and disposal are funded and delivered by national state committees in consultation with Executive Powers, state-owned enterprises, and through consultants or local representative offices. The second step for delivering urban area development strategies and action plans, therefore, requires institutional capacity-building initiatives for target city, *rayon*, and other local institutions so that they are capable of successfully planning, implementing, and managing urbanization and delivering urban services for their respective cities and towns over the long term.

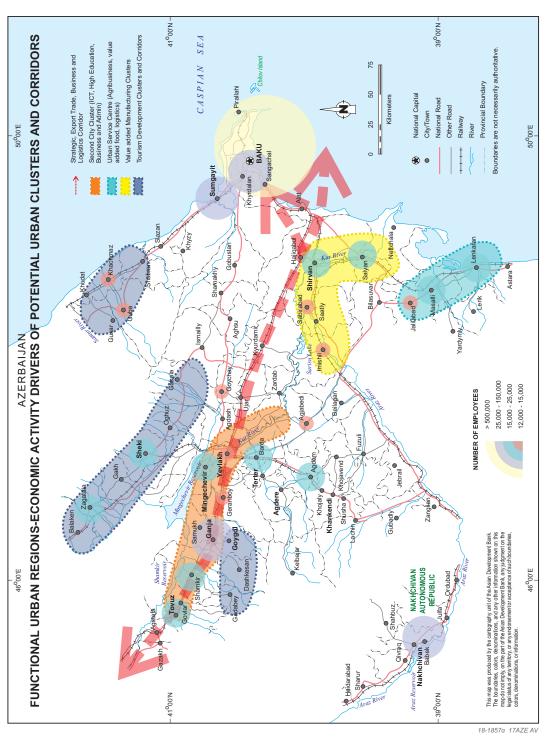
# Level 3: Targeted Urban Infrastructure Sector Investments and Support for Capacity Building

Based on the preceding steps of the approach, priority targeted urban infrastructure sector investments and supporting capacity-building initiatives can then be designed and implemented at the national, regional, and local levels to meet the urbanization demands of the future in two broad areas.

Urban infrastructure sector investment and capacity-building needs have been identified in the assessment in section 3 of the NUA in the following five sectors:

- Water supply and sanitation. This includes centralized wastewater systems for smaller towns and peri-urban areas and subject to feasibility, small-scale, noncentralized sanitation systems for unserved rural areas.
- **Solid waste management.** This includes the implementation of solid waste management sector investments in designated regions based on approval and implementation of the national strategy and revised institutional, legal, and regulatory frameworks.

Map 6: Functional Urban Regions—Economic Activity Drivers of Potential Urban Clusters and Corridors



Note: Data are from government statistics. By making any designation of or reference to a particular territory or geographic area, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

Source: Based on State Statistical Committee of the Republic of Azerbaijan. 2015. Statistical Yearbook. Baku.

- Transport. This includes completion of the Kars-Tbilisi-Baku regional rail project and potentially of basic, lower-cost improvements to existing urban transport systems of selected cities.
- Energy. This includes electrical power distribution system rehabilitation and expansion.
- **Telecommunications.** This includes installation of 4G internet/broadband services in currently unserved urban, peri-urban, and rural areas.

Urban development that promotes diversification and regionalization will also require more "thematic" infrastructure investment, service delivery, and capacity building, which cross-cuts economic sectors, exploits the natural comparative advantages of the regions or urban clusters, and develops industries and services that will attract investment and generate employment and income growth. These might include investment programs in the following sectors:

- Information and communication technology. This includes infrastructure and higher
  education support for both hardware and software technology production and research
  and development of science, research and technology parks in the regions.
- **E-business development.** This could support the rollout of the major national 4G-internet/broadband initiative with investment in Azerpost to promote e-business development and penetration of e-marketing to regional and rural areas.
- **High value-added manufacturing.** This can be done by introducing best practice organizational models to support industrial entrepreneurship and the development of industrial technology parks and business incubators in selected regional centers.
- Export trade and logistics. This can be done by exploiting Azerbaijan's unique
  opportunities as an Asian and European transit country to further improve and upgrade
  logistics infrastructure, promote free trade and export processing zones, and improve
  customs and foreign trade capacity in key cross-border locations.
- Agribusiness and high-value food production. This includes measures to support
  farm to market infrastructure, introduce clean technologies in plant growing and animal
  breeding, develop greenhouse and refrigerated logistics centers, and remove market
  access restrictions in the regions.
- **Tourism.** This involves promoting tourism as one of the fastest-growing sectors of the economy by supporting the creation of hotel enterprises, support for public and private investment in leisure and visitor facilities, restoration of heritage sites and buildings, and management and promotion of national parks and other areas of natural beauty.

# 5 Policy and Programming

## 5.1 ADB Support in Urban Development

Since Azerbaijan joined the Asian Development Bank (ADB) in 1999, ADB has provided an assistance portfolio that by 2012 totaled \$1.2 billion, the second-largest international financial institution portfolio after the World Bank. During this period, ADB's strategy transitioned from an initial poverty reduction focus in the early 2000s—which included direct support to internally displaced persons; agricultural development; and rural-based water, sanitation, and roads—to a more infrastructure-led focus in the energy, transport, water supply, and sanitation sectors. In all, about 92% of the entire portfolio has been invested in transport (roads), energy, and urban services (water and municipal services), contributing significantly to urbanization and urban development within the nation. Lessons learned from this period that relate directly to the urban sector include the future need to (i) more accurately meet the government's development challenges and sector selectivity criteria; (ii) progressively transition from investment financing to knowledge services and technology facilitation; and (iii) focus future assistance on nonphysical components, particularly on capacity building.

Since its adoption in 2012, the nation's vision for diversification, *Azerbaijan 2020*—reinforced by the recent order to prepare the *Strategic Roadmap on the National Economy and Main Economic Sectors* to deliver and extend the vision—has been transforming Azerbaijan's national focus and priorities. These include transitioning toward a knowledge-based economy; accelerating inclusive development and diversification; improving competitiveness; and in particular, prioritizing non-oil economic growth. The vision also foresees a doubling of per capita gross domestic product by 2020, coupled with an inclusive growth agenda that includes high-quality social welfare, an expanded and improved jobs market, reduced regional inequalities, and enhanced access to public services, notably in remote rural areas. ADB's recent country partnership strategy (CPS) underpins the nation's renewed vision: targeting support to assist Azerbaijan to transition to a diversified, knowledge-based economy, bolster sustainable, non-oil economic growth, and create economic opportunities, especially for women and the poor in Azerbaijan's secondary towns and rural areas. The CPS prioritizes three primary sectors—urban infrastructure, transport, and energy—summarized as follows:

Total lending in 2012 included (i) a flood mitigation project (\$22 million), (ii) an urban water supply and sanitation project (\$30 million), (iii) a highway improvement project (\$52 million), (iv) a power transmission enhancement project (\$160 million), (v) a roads network development multitranche financing facility (\$456 million), and (v) a water supply and sanitation investment multitranche financing facility (\$375 million). In addition, a range of nonlending activities has been completed.

- Urban infrastructure and services. The package includes upgrades and expansions of water supply, sanitation, and solid waste management to improve service quality, coverage, health, and environmental conditions in intermediary cities and other urban conurbations. Assistance will also be provided to improve Baku's urban transport system, including the potential to involve public-private partnerships (PPPs) to reduce air pollution and traffic congestion; improve road safety; and expand the provision of more affordable transport options, particularly for the poor and disadvantaged. Parallel knowledge components will strengthen operation and maintenance, asset management metering, and billing and tariff adjustments. International twinning arrangements are also planned.
- Transport. ADB is adopting a total-system approach in developing a transport network that will contribute to non-oil sector development. This includes assistance to complete the government's two highest priority corridors: the east-west corridor (Central Asia Regional Economic Cooperation Corridor 1) and the north-south corridor, both being crucial for regional and international transport linkages. The north-south corridor improvements will also include local road upgrades to improve urban-rural connectivity for rural populations. Technical assistance is also being provided to develop a Baku to Sumgayit rail transport investment. In addition, knowledge components are being provided under an existing multitranche financing facility. These include development of a legal and regulatory framework, mainstreaming road safety, introducing performance-based maintenance contracts, facilitating best practices in project design and standards, and improving road network asset management and road maintenance.
- Energy. ADB is assisting in the evaluation of renewable energy resources including biomass, solar, wind, and hydropower, and development of institutional, legal, and policy frameworks for renewables to facilitate low-carbon development and climate resilience. Assistance is also being provided to improve the enabling framework for PPP in power distribution and enhance cost recovery and sustainability. ADB is also formulating a power sector master plan; it will continue to conduct policy dialogue on tariff issues, capacity building, and good governance; and promote energy sector reform. As previously discussed, consideration is also being given to develop and implement a major power distribution investment program for intermediary cities and rural areas.

Additional intervention may include assistance in areas such as energy efficiency improvements, bank privatization, insurance and leasing, education, and agriculture and natural resources management. ADB may also consider financing petrochemicals processing sector projects where they could be transformative to the economy and are difficult to finance through conventional financing modalities. ADB will also promote private sector and PPP interventions, and rural financial inclusion. It also has ongoing regional technical assistance initiatives that will improve environmental safeguards implementation, mainstream land acquisitions and resettlement processes, assist to develop the microfinance sector, and promote gender-inclusive growth throughout the region. ADB's indicative sovereign operations funding is \$752 million for the 2014–2017 period.

## 5.2 Current Development Partner Focus

The World Bank has a long history in Azerbaijan, which joined the World Bank in 1992. It has a two-pillar strategy: (i) strengthening of the non-oil economy through an improved business environment, better infrastructure, and agricultural improvements; and (ii) improving the effectiveness of community and social services through improvements to health, education, social protection, and water supply. The World Bank has financed a total of 47 projects across a range of sectors, totaling over \$3.36 billion of International Development Association credits and grants, and International Bank for Reconstruction and Development loans. Its lending has been dominated by the transport sector (48%) and the water and sanitation sector (22%). Other sectors receiving financing are rural development and agriculture (9%), social sector development (9%), public administration and law (4%), urban development (4%), financial and private sector development (1%), and energy and mining (3%).

In addition, there are over 20 other multilateral, bilateral, and UN-system agencies completing over 60 projects across a range of sectors in Azerbaijan including agriculture, education, energy, health, transport, waste, sanitation, environment, and private sector development. In the energy sector, the Islamic Development Bank, European Bank for Reconstruction and Development (EBRD), and Japan (through the Japan International Cooperation Agency) are involved in power plant construction and rehabilitation, Germany in power transmission, and several agencies in energy planning efficiency and auditing. Along with ADB, KfW is involved in the renewable energy sector. In transport, the EBRD, Islamic Development Bank, and others are assisting in regional and secondary road development and related capacity building, Japan in road administration and intelligent transport systems, the European Union (EU) in developing international logistical centers, and the Czech Exim Bank in both roads and railways. In the water and sanitation sector, a range of agencies are involved in water and wastewater provision including Japan, KfW, the Republic of Korea (through the Korean International Cooperation Agency) and the Saudi Fund for Development, while the EU and the Islamic Development Bank are involved with wider issues of flood protection and surface water management. The EU is involved in waste governance and management, and the United Nations Children's Fund (UNICEF) in school hygiene and sanitation.

# 6 Recommended Priority Interventions

The national urban assessment process has been designed to evaluate the urban profile of Azerbaijan and assess future needs for urban development. It has also set a vision for future development and investment in the urban sector, based on the principles set out in Azerbaijan 2020 and the Strategic Roadmap, for economic diversification into the non-oil sectors and geographic diversification to achieve balanced regional and urban development. To identify and recommend priority interventions to deliver on this vision, a clear three-level strategy framework has been proposed. Interventions will be identified through the preparation of a national strategy for regional and urban development that will prioritize urban centers, clusters, or corridors, following which integrated economic and spatial development strategies and action plans can be prepared. It is this framework that will enable the national urban assessment to target urban infrastructure and economic sector investments and capacity-building initiatives.

In contrast to the existing urban development support programs, recommended priority interventions are grouped into the following three areas of support:

- Regional and urban planning support. Advisory and capacity-building support to prepare a national strategy for regional economic development and integrated urban action plans.
- Integrated urban development investments. Infrastructure investments that support the diversification of the economy and achieve cost-effective urban infrastructure and service provision. This would include integrated urban development investments with prioritized action plans covering the current sectors of focus including water and sanitation, solid waste management, transport, energy, and telecommunications. A critical component is the institutional reform and capacity development to corporatize urban utility agencies where practicable, to ensure efficient management of services and sustainability of assets.
- Economic sector development interventions. These would support diversification and balanced regional development in a range of industrial and service sectors such as tourism, information and communication technology, export trade and logistics, and improving higher education and technical and vocational education and training skills, through infrastructure investment, regulatory advice, and capacity-building support.

The three areas of support and recommended priority interventions are set out in Table 6. Also shown are the associated lending products in the indicative assistance program of the Asian Development Bank Country Operations Business Plan 2014–2016.

**Table 6: Recommended Priority Interventions** 

Grouping	Intervention Area	Description
Regional and Urban Planning Support	National Strategy for Regional Economic Development	<ul> <li>Evaluate functional economic regions</li> <li>Identify urban centers, clusters, and corridors</li> <li>Update regulatory and legislative frameworks</li> <li>Integrate economic and spatial planning</li> </ul>
	Priority Urban Area Development Strategies and Action Plans	<ul> <li>Prioritize urban centers, clusters, and corridors</li> <li>Support preparation of strategies and plans</li> <li>Carry out sector assessments, roadmaps, and investment plans</li> <li>Strengthen local institutional capacities</li> <li>Identify priority projects for IFI or private sector financing</li> </ul>
Urban Infrastructure Sector Investments	Water Supply and Sanitation <sup>a</sup>	<ul> <li>Institutional reform to improve service efficiency and sustainability of assets</li> <li>Corporatize utility to improve financial management and reduce dependency on state subsidies</li> <li>Decentralized wastewater systems for smaller towns and peri-urban areas</li> <li>Small-scale sanitation systems for unserved rural areas</li> </ul>
	Solid Waste Management <sup>b</sup>	<ul> <li>National SWM strategy</li> <li>Revised institutional, legal, and regulatory frameworks</li> <li>SWM sector investments in designated regions</li> </ul>
	Transport <sup>c</sup>	- Low-cost urban transport improvements in selected cities
	Energy <sup>d</sup>	<ul> <li>Power distribution system rehabilitation and expansion</li> </ul>
	Telecommunications	- Internet and broadband services in unserved urban, peri-urban, and rural areas
	Climate Change Mitigation	<ul> <li>Environmental impact assessment policy and regulations</li> <li>Emissions control and mitigation</li> <li>Climate proofing</li> </ul>
Economic Sector Development	Tourism	<ul> <li>Creation of hotel enterprises</li> <li>Public and private investment in leisure and visitor facilities</li> <li>Restoration of heritage sites and buildings</li> <li>Management and promotion of national parks</li> </ul>
	ICT	<ul> <li>Support for both hardware and software technology production</li> <li>Development of science, research and technology parks</li> </ul>
	E-business development	<ul> <li>Rollout of the national 4G-internet/broadband initiative</li> <li>Investment in Azerpost to promote e-business in regional and rural areas</li> </ul>
	High Value-Added Manufacturing	<ul> <li>Best practice organizational models to support industrial entrepreneurship</li> <li>Development of industrial technology parks and business incubators</li> </ul>
	Export Trade and Logistics	<ul> <li>Improve and upgrade logistics infrastructure</li> <li>Promote free trade and export processing zones</li> <li>Improve customs and foreign trade capacity in key cross-border locations</li> </ul>
	Agribusiness and High-Value Food Production	<ul> <li>Investments in farm to market infrastructure</li> <li>Development of greenhouse and refrigerated logistics centers</li> <li>Removal of market access restrictions</li> </ul>
	Improving Higher Education and TVET Skills	<ul> <li>Expand higher education places in technology institutions</li> <li>Develop university, research and technical institute campuses in conjunction with research, science and technology parks</li> </ul>

ICT = information and communication technology, IFI = international financial institution, MFF = multitranche financing facility, SWM = solid waste management, TVET = technical and vocational education and training.

Note: Lending products included in the indicative assistance program of the Asian Development Bank Country Operations Business Plan 2014–2016 include the following:

- <sup>a</sup> Water Supply and Sanitation:
  - MFF Second Water Supply and Sanitation Investment Program (2016, Firm)
- <sup>b</sup> Solid Waste Management:
- Solid Waste Management Project (2016, Firm)
- MFF Second Road Network Development Program, Project 3 (2016, Firm)
  MFF Baku Sustainable Urban Transport Investment Program, Project 2 (2016, Standby)
- d Energy: MFF Power Distribution Investment Program, Project 1 (2016, Firm)

Source: Authors.

## References

- Asian Development Bank. 2003. Technical Assistance to Azerbaijan for Development of a Competition Policy Framework. Manila.
  ——. 2012. Urban Operational Plan 2012–2020. Manila.
  ——. 2014. Country Partnership Strategy: Azerbaijan, 2014–2018, Gender Analysis (Summary). Manila.
  ——. 2014. Country Partnership Strategy: Azerbaijan, 2014–2018, Private Sector Assessment (Summary). Manila.
  ——. 2015. Asian Development Outlook 2015 Update. Manila.
  ——. 2015. Manual for Undertaking National Urban Assessments. Manila.
  ——. 2016. Asian Development Bank Outlook 2016: Highlights. Manila
  Center for Economic and Social Development (CESD). 2015. Azerbaijani State Budget in 2016: Perspectives and Challenges. Baku.
- Central Bank of Azerbaijan. 2014. Real GDP Growth Rate. Baku.
- Decree of the President of the Republic of Azerbaijan. 2008. State Program on Poverty Reduction and Sustainable Development for 2008–2015. Baku.
- Decree of the President of the Republic of Azerbaijan. 2014. State Program on Socioeconomic Development of Regions, 2014–2018. Baku.
- European Bank for Reconstruction and Development (EBRD). 2014. *Strategy for Azerbaijan*, Annex 7: Gender Equality. London.
- Foreign Affairs Magazine. 2015. Azerbaijan 2020: Turning Strength into Stability. Baku.
- Government of the Republic of Azerbaijan. 2013. "Azerbaijan 2020: A Look into the Future: Concept of Development" Report, Section 3 Azerbaijan 2020: Strategic View and Main Priorities. Baku.
- Law on Industrial and Domestic Wastes. 1998, amended 2007. Baku.
- Law on the State Register of Immovable Property. Baku.
- Mamedova et al. 2002. "Local Government in Azerbaijan," In Local Government and Public Service Reform Initiative, "Local Governments in the Caucasus and Central Asia," Chapter 7. Budapest.

- Order of President of the Republic of Azerbaijan. 2016. "Basic Directions of the Strategic Roadmap on the National Economy and Main Economic Sectors." Baku.
- Parliamentary Assembly of the Council of Europe. Resolution 1917. 2013. The Honouring of Obligations and Commitments by Azerbaijan, page 2. Strasbourg.
- President of Azerbaijan. "Azerbaijan 2020: A Look into the Future: Concept of Development" Report, Section 3 Azerbaijan 2020: Strategic View and Main Priorities. Baku.
- Singru, R. N., and M. Lindfield. 2014. *Republic of the Philippines: National Urban Assessment*. Asian Development Bank. Mandaluyong City.
- Singru, R. N., and M. Lindfield. 2016. *Manual for Undertaking National Urban Assessments*. Asian Development Bank. Manila.
- State Oil Fund of the Republic of Azerbaijan. 2010. SOFAZ Annual Report 2010. Baku.
- State Statistical Committee of the Republic of Azerbaijan. 2014. Statistical Yearbook. Baku.
- State Statistical Committee of the Republic of Azerbaijan. 2015. Demographic Indicators of Azerbaijan-Statistical Yearbook 2015. State Statistical Committee of the Republic of Azerbaijan. Baku.
- The State Statistical Committee of the Republic of Azerbaijan. 2015. Section: Population, Labour Market & Industry Statistics. Baku.
- Town Planning and Construction Code of Azerbaijan. June 2012. Baku.
- United Nations Development Programme. 2013. Human Development Report, "Gender Inequality Index". New York.
- ——. 2014. Human Development Report 2014 Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience.
- UNECE. 2014. Statistical Database for Europe. United Nations Economic Commission for Europe. Section 2 Population and Gender: Database on Fertility, Families & Households. Geneva.
- 2008. Living Standards Measurement Survey. Washington, DC.2009. Business Environment and Enterprise Performance Survey 2009.

Washington, DC.

- ——. 2010. Country Partnership Strategy for Azerbaijan 2011-2014. Washington, DC.
- ——. 2011. Azerbaijan: Building Assets and Promoting Self Reliance: The Livelihoods of Internally Displaced Persons. Washington, DC
- ——. 2013. World Development Indicators 2013. Washington, DC.
- ——. 2016. Doing Business 2016: Economy Profile Azerbaijan. Washington, DC.

### Strengthening Functional Urban Regions in Azerbaijan

National Urban Assessment 2017

This publication helps guide investment planning and financing across key urban infrastructure sectors of Azerbaijan to improve the performance of cities—with a focus on economy, equity, and environment. The National Urban Assessment for Azerbaijan is among a series prepared by the Asian Development Bank for selected developing countries under its Urban Operational Plan 2012–2020.

#### About the Asian Development Bank

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 67 members—48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.