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Azerbaijan

GEOGRAPHY, CLIMATE AND POPULATION

Geography

Azerbaijan, with a total area of 86 600 km^2, is located on the southeastern slopes of the Caucasus Mountains. It is bordered to the east by the Caspian Sea, to the south by the Islamic Republic of Iran, to the southwest by Turkey, to the west by Armenia, to the northwest by Georgia and to the north by the Russian Federation. The Nakhchivan Autonomous Republic of Azerbaijan in the southwest is separated from the rest of the country by Armenia.

About 43 percent of the area of Azerbaijan is situated more than 1 000 m above sea level. The country can be divided into five main physiographic regions:

- the Greater Caucasus mountain range in the north, extending from the Black Sea in the west to the Caspian Sea in the east, over the northern part of Georgia and Azerbaijan and the southern part of the Russian Federation;
- the Lesser Caucasus mountain range, south of the Greater Caucasus and covering the south of Georgia and Azerbaijan and the north of Armenia;
- the lowlands around the Kura and Araks Rivers;
- the Talish Mountains with the adjoining Lankaran lowland in the southeast, along the border with the Islamic Republic of Iran;
- the Nakhchivan Autonomous Republic in the southwest.

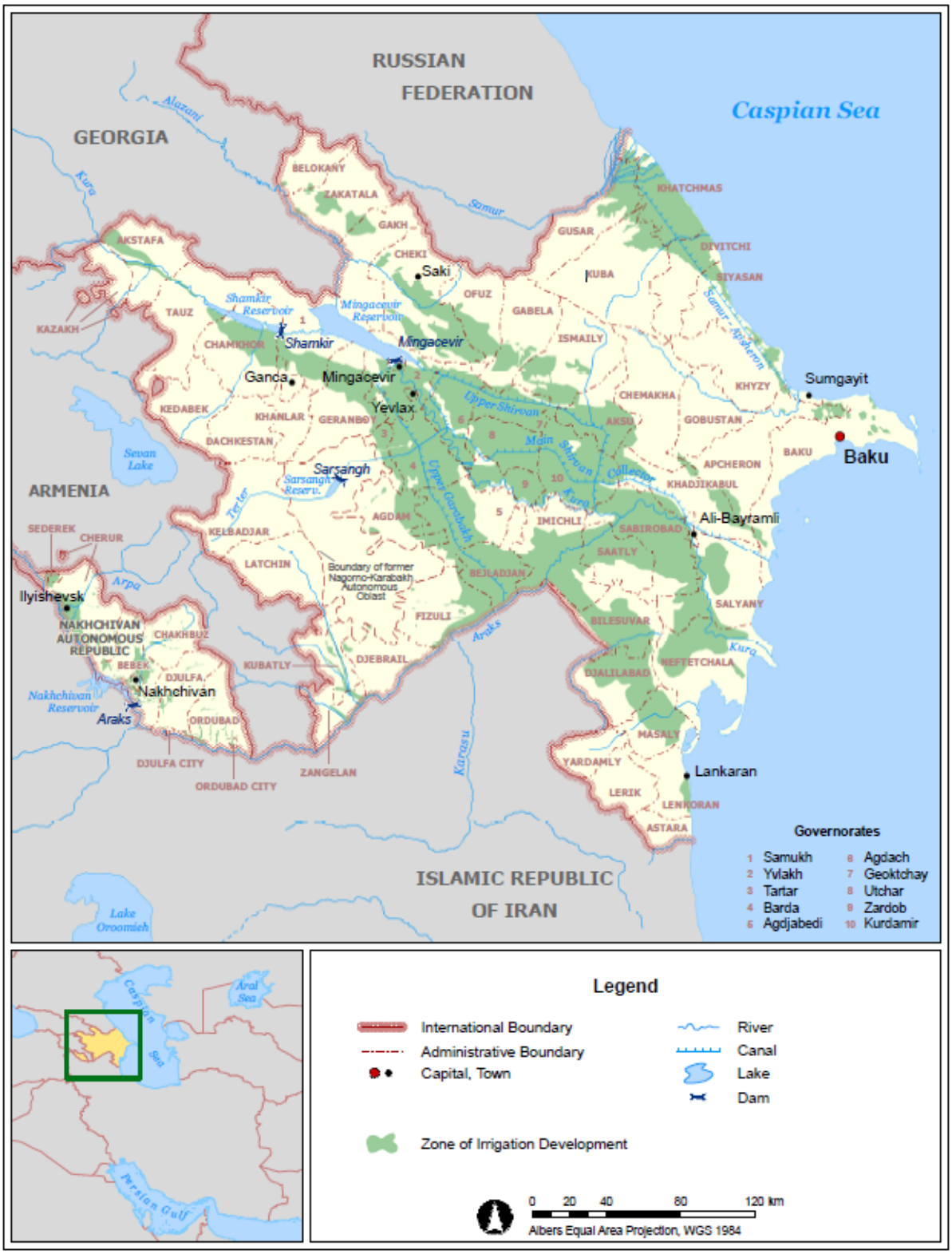
The cultivable area is estimated to be about 4.32 million ha, which is 50 percent of the total area of the country. In 2005, the cultivated area was 2.06 million ha, or 48 percent of the cultivable area, of which 1.84 million ha were annual crops and 0.22 million ha permanent crops (Table 1). Between 1993 and 2005 the cultivated area increased by 15 percent.

Climate

Azerbaijan is situated on the northern edge of the subtropical zone. Its climatic diversity is the result of its particular geographical location and landscape, the proximity of the Caspian Sea, the effect of sun's radiation and air masses of different origin.

The climate in Azerbaijan is continental. The weather in the lowlands is arid, with average summer temperatures of over 22°C. In the mountain regions, temperatures can fall below 0°C in winter and in Nakhchivan severe frost may occur. Humid tropical weather prevails in the coastal zone near the Caspian Sea, mainly in the Lankaran lowlands in the southeast. The estimated average precipitation is 447 mm/year.

FIGURE 1
Map of Azerbaijan



AZERBAIJAN **FAO - AQUASTAT, 2008**

Population

The total population is 8.4 million (2005), around 50 percent of which is rural. The average population density is 97 inhabitants/km2.

In 2006, 80 percent of the population had access to improved sanitation (90 and 70 percent in urban and rural areas respectively) and 78 percent had access to improved water sources (95 and 59 percent in urban and rural areas) (Table 1).

TABLE 1
Basic statistics and population

Physical areas			
Area of the country	2005	8 660 000	ha
Cultivated area (arable land and area under permanent crops)	2005	2 064 700	ha
• as % of the total area of the country	2005	23.8	%
• arable land (annual crops + temp fallow + temp. meadows)	2005	1 843 200	ha
• area under permanent crops	2005	221 500	ha
Population			
Total population	2005	8 411 000	inhabitants
• of which rural	2005	50.1	%
Population density	2005	97.1	inhabitants/km^2
Economically active population	2005	3 980 000	inhabitants
• as % of total population	2005	47.3	%
• female	2005	46.2	%
• male	2005	53.8	%
Population economically active in agriculture	2005	982 000	inhabitants
• as % of total economically active population	2005	24.7	%
• female	2005	52.4	%
• male	2005	47.6	%
Economy and development			
Gross Domestic Product (GDP) (current US$)	2007	31 250	million US$/yr
• value added in agriculture (% of GDP)	2007	6	%
• GDP per capita	2005	1 569	US$/yr
Human Development Index (highest = 1)	2005	0.746	
Access to improved drinking water sources			
Total population	2006	78	%
Urban population	2006	95	%
Rural population	2006	59	%

ECONOMY, AGRICULTURE AND FOOD SECURITY

Agriculture plays an important role in the Azerbaijan's development and in guaranteeing the supply of staples and constitutes one of the main sectors of the economy.

In 2007, the Gross Domestic Product (GDP) was US$31.3 billion. The share of agriculture dropped from 39 percent in 1990 to 6 percent in 2007, due to extensive industrial development from 1995 to 2004. Production sharing agreements with large foreign companies regarding oil and gas fields have led to the rapid development of these industries.

In 2005, the total economically active population was 3.98 million, or just over 47 percent of the total population, with some 25 percent employed in the agricultural sector. Women make up about 52 percent of the rural labour force.

Plant cultivation is one of the key sectors of agriculture in Azerbaijan. Its fertile lands, good climate and topography provide opportunities for the production of agricultural products year-round (Heydar Aliyev

Foundation, 2008). The most important crops are wheat, cotton, potatoes, vegetables, tobacco, melon, sugar beet, sunflowers and fruit trees.

WATER RESOURCES

It is estimated that internal renewable water resources amount to about 8.12 km^3/year (Table 2). Annual surface runoff is estimated at 5.96 km^3 and groundwater recharge at 6.51 km^3, of which 4.35 km^3 constitutes the base flow of the rivers. The estimated incoming surface flow is 25.38 km3/year, of which 11.91 km^3 from Georgia, 7.50 km^3 from the Islamic Republic of Iran and 5.97 km^3 from Armenia. The Sumar River, with a total flow of 2.36 km^3/year, forms the border between Azerbaijan and the Russian Federation. The total renewable surface water resources (RSWR), including incoming and bordering flows, are therefore estimated at 32.52 km^3/year. In the case of the Kura and Araks Rivers, which flow through Turkey, Georgia, Armenia, the Islamic Republic of Iran and Azerbaijan, discussions are under way on a water sharing agreement.

TABLE 2
Water resources

Renewable freshwater resources			
Precipitation (long-term average)	-	447	mm/yr
	-	38.7	10^9 m^3/yr
Internal renewable water resources (long-term average)	-	8.115	10^9 m^3/yr
Total actual renewable water resources	-	34.675	10^9 m^3/yr
Dependency ratio	-	76.6	%
Total actual renewable water resources per inhabitant	2005	4 123	m^3/yr
Total dam capacity	2003	21 542	10^6 m^3

The groundwater resources are famous for their quality as mineral drinking water and are also used for medical purposes. The Nakhchivan Autonomous Republic is especially rich in mineral groundwater.

Azerbaijan has four major river basins, two of which are international:

- The basin of the Kura and Araks Rivers. This is by far the largest basin in the country (excluding the occupied zone and the zone declared neutral in May 1994). The Kura River rises in the Kars upland in northeast Turkey. It then flows into Georgia and crosses the border to Azerbaijan in the northwest. The total length of the Kura River system is 1 515 km, of which 900 km is located within Azerbaijan. The total annual inflow from Georgia is estimated at 11.91 km^3. The Araks River also rises in the northeast of Turkey. It forms the border between Turkey and Armenia, Turkey and Azerbaijan, the Islamic Republic of Iran and Azerbaijan, the Islamic Republic of Iran and Armenia, and the Islamic Republic of Iran and Azerbaijan again, before flowing into the eastern part of Azerbaijan. About 100 km downstream of the border it joins the Kura River, which continues to flow southeast towards the Caspian Sea. The total inflow of the main branch of the Araks River and its tributaries from Armenia and Iran is estimated at 13.47 km^3/year, bringing the total inflow into Azerbaijan to an estimated 25.38 km^3/year.
- The Samur River Basin, located in the northeast of the country. The Samur River rises in the Russian Federation and then forms its border with Azerbaijan. Its estimated annual discharge is 2.36 km^3, half of which is considered to be available for Azerbaijan. The river divides into several branches before flowing into the Caspian Sea.
- The Caspian Sea coastal river basins in the northeast, between the Samur and Kura River Basins.
- The Caspian Sea coastal river basins in the Lankaran region in the southeast, south of the Kura River Basin.

The total reservoir capacity of Azerbaijan's dams is around 21.54 km^3. Most of this capacity, 21.04 km^3, comes from large dams, of more than 100 million m^3 each. The four largest reservoirs are the Mingacevir and Shamkir on the Kura River, the Araks dam on the Araks River, and the Sarsang on the Terter River, in Armenia.

In 2005, wastewater production totalled some 659 million m^3. Most wastewater is produced by the cotton cleaning, cotton oil production, fish-curing and grape processing industries. In 2005, 161 million m^3 of wastewater was treated for reuse (Table 2). Although wastewater treatment plants exist in 16 towns and cities, the majority are partly or completely out of operation.

INTERNATIONAL WATER ISSUES

Azerbaijan is party to three agreements with its neighbours on transboundary rivers: with the Islamic Republic of Iran on the Araks River, with Georgia on Gandar Lake and with the Russian Federation on the Samur River. No agreement exists regarding the Kura River, the most important transboundary river in the region (UNECE, 2004). Issues of critical importance are the sharing and joint management of the Kura and Araks Rivers and of the Caspian Sea to prevent further pollution and ensure sustainable development of their resources.

In 1997 the Government of Georgia ratified an agreement with Azerbaijan concerning environmental protection, providing for cooperation in the creation of specifically protected areas within transboundary ecosystems.

The Caucasus Initiative, launched by the German Ministry of Cooperation and Development, envisages, among other things, the implementation of the "Ecoregional Nature Protection Programme for Southern Caucasus" covering the three Caucasus countries: Georgia, Azerbaijan and Armenia. It will be implemented in the nearest future and will facilitate to protect and sustainable use of water resources in the region (Tsiklauri, 2004).

A number of international organizations have cooperated on initiatives in Azerbaijan in the field of ecology through the UN mission and the UNDP. Negotiations have been held with representatives of the UN, UNEP, UNESCO, World Bank and environmental protection organizations of the USA, UK, Germany, Turkey, the Islamic Republic of Iran and CIS countries. One of the results has been the adoption of the "Agreement on cooperation in the field of ecology and environmental protection between Azerbaijan and Turkey" (UNEP/GRID-Arendal, 2005).

From 2000 to 2002, USAID, in collaboration with Development Alternatives Inc. (DAI), implemented the South Caucasus Water Management project. Its aim was to strengthen co-operation among water agencies at local, national and regional levels and demonstrate integrated water resources management. In parallel, between 2000 and 2006, the EU and the Technical Assistance Commonwealth of Independent States (TACIS) carried out the Joint River Management Programme on Monitoring and Assessment of Water Quality on Transboundary Rivers for the prevention, control and reduction of the impact of trans-boundary pollution. The programme covered four basins, including the Kura River Basin. In addition, regional organisations such as REC, Eurasia Foundation, and numerous local foundations have promoted national and regional activities concerning water resources management and protection (UNEP, 2002).

Between 2002 and 2007, NATO-OSCE realized the South Caucasus River Monitoring Project. Its general objectives were to establish the social and technical infrastructure for a joint international Transboundary River water quality and quantity monitoring, data sharing and watershed management system among the Republics of Armenia, Azerbaijan and Georgia (OSU, 2008).

The project Reducing Transboundary Degradation in the Kura-Araks River Basin, implemented by the UNDP Bratislava Regional Centre in collaboration with the Global Environmental Facility (GEF), has involved four of the basin countries: Armenia, Azerbaijan, Georgia and the Islamic Republic of Iran. Efforts are being made to involve Turkey in the project as well. The preparation phase, which is co-funded by Sweden, began in July 2005 and will last 18 months. The objective of the project is to ensure that the quality and quantity of the water throughout the Kura-Araks River system meets the short and long-term needs of the ecosystem and the communities that rely upon it. It will be achieved by fostering

regional cooperation, increasing the capacity to address water quality and quantity problems, demonstrating water quality/quantity improvements, initiating required policy and legal reforms, identifying and preparing priority investments, and developing sustainable management and financial arrangements.

Currently there are no water treaties between the three south Caucasian countries owing to the political situation in the region. Nagorno-Karabakh is one of the main obstacles, making it difficult for Azerbaijan and Armenia to sign a treaty even one only relating to water resources management (Berrin and Campana, 2008).

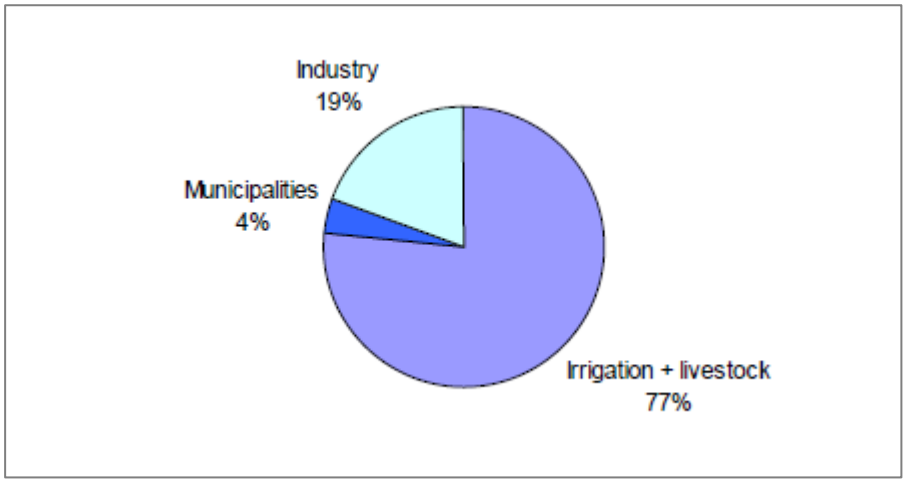
WATER USE

In 2005 water withdrawal was estimated at 12.21 km^3, of which 76.4 percent for agricultural purposes, 4.2 percent for municipal uses and 19.3 percent for industrial processes (Table 3 and Figure 2).

TABLE 3
Water use

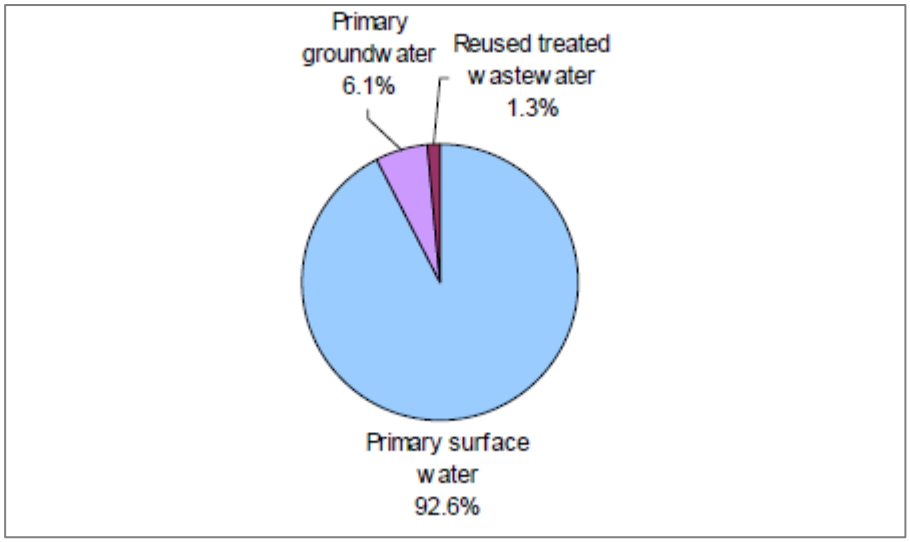
Water withdrawal			
Total water withdrawal	2005	12 211	10^6 m^3/yr
- irrigation + livestock	2005	9 330	10^6 m^3/yr
- municipalities	2005	521	10^6 m^3/yr
- industry	2005	2 360	10^6 m^3/yr
• per inhabitant	2005	1 452	m^3/yr
Surface water and groundwater withdrawal	2005	12 211	10^6 m^3/yr
• as % of total actual renewable water resources	2005	35	%
Non-conventional sources of water			
Produced wastewater	2005	659	10^6 m^3/yr
Treated wastewater	2005	161	10^6 m^3/yr
Reused treated wastewater	2005	161	10^6 m^3/yr
Desalinated water produced		-	10^6 m^3/yr
Reused agricultural drainage water		-	10^6 m^3/yr

FIGURE 2
Water withdrawal by sector
Total 12.211 km^3 in 2005



In 2005, freshwater withdrawal totalled 12.21 km^3. It was estimated that primary surface water accounted for 92.6 percent, primary groundwater for 6.1 percent and reused treated wastewater for 1.3 percent (Figure 3).

FIGURE 3
Water withdrawal by source
Total 12.211 km^3 in 2005



IRRIGATION AND DRAINAGE

Evolution of irrigation development

The irrigation potential is estimated at 3.2 million ha. In the last century, irrigation was concentrated alongside the rivers and it was only at the beginning of this century that the construction of large irrigation canals started. In 1913, 582 000 ha were irrigated. The most intensive development took place after the Second World War and in 1975 the area equipped for irrigation was 1.17 million ha. By 1995 this had become 1.45 million ha, which is 45 percent of the irrigation potential.

In 1995, the total length of all irrigation canals was 65 900 km, of which only 2 400 km, or 3.6 percent, were concrete canals. National irrigation efficiency was estimated at 55 percent. The largest canals are the Upper Garabakh, the Upper Shirvan and the Samur-Apsheron, all earthen. The Upper Gabarakh canal runs southeast from the Mingacevir reservoir to the Araks River. It is about 174 km long and has a capacity of 113.5 m^3/s. About 85 000 ha were irrigated by this canal in 1995. The Upper Shirvan canal also starts from the Mingacevir reservoir and runs east to the Akhsu River. It is about 126 km in length and has a capacity of 78 m^3/s and in 1995 irrigated about 91 100 ha.

In 1995, almost 90 percent of the irrigation was surface irrigation, mainly furrow and border strip irrigation. Sprinkler irrigation and localized irrigation were used mainly on perennial plantations and vineyards (Table 4 and Figure 4). Surface water was used on 93 percent of the area, mainly from reservoirs and through direct pumping in rivers and canals (Figure 5). About 96 700 ha were irrigated by groundwater through more than 5 000 wells. Private farmers exploit this source intensively as the major irrigation installations are seriously degraded.

TABLE 4
Irrigation and drainage

Irrigation potential	-	3 200 000	ha
Water management			
1. Full or partial control irrigation: equipped area	2003	1 426 000	ha
- surface irrigation	1995	1 302 000	ha
- sprinkler irrigation	1995	149 000	ha
- localized irrigation	1995	2 618	ha
• % of area irrigated from surface water	1995	93	%
• % of area irrigated from groundwater	1995	7	%
• % of area irrigated from mixed surface water and groundwater	1995	0	%
• % of area irrigated from non-conventional sources of water	1995	0	%
• area equipped for full or partial control irrigation actually irrigated		-	ha
- as % of full/partial control area equipped		-	%
2. Equipped lowlands (wetland, ivb, flood plains, mangroves)		-	ha
3. Spate irrigation		-	ha
Total area equipped for irrigation (1+2+3)	**2003**	**1 426 000**	**ha**
• as % of cultivated area	2003	69	%
• % of total area equipped for irrigation actually irrigated		-	%
• average increase per year over the last 8 years	1995-2003	-0.23	%
• power irrigated area as % of total area equipped	2003	33.6	%
4. Non-equipped cultivated wetlands and inland valley bottoms		-	ha
5. Non-equipped flood recession cropping area		-	ha
Total water-managed area (1+2+3+4+5)	**2003**	**1 426 000**	**ha**
• as % of cultivated area	2003	69	%
Full or partial control irrigation schemes **Criteria:**			
Small-scale schemes	1995	77 420	ha
Medium-scale schemes	1995	192 600	ha
large-scale schemes	1995	1 183 000	ha
Total number of households in irrigation		-	
Irrigated crops in full or partial control irrigation schemes			
Total irrigated grain production (wheat and barley)		-	metric tons
• as % of total grain production		-	%
Harvested crops			
Total harvested irrigated cropped area	2004	1 391 521	ha
• Annual crops: total	2004	1 290 114	ha
- Wheat	2004	610 919	ha
- Rice	2004	2 573	ha
- Barley	2004	158 909	ha
- Maize	2004	33 194	ha
- Other cereals	2004	9 302	ha
- Potatoes	2004	65 796	ha
- Sugar beet	2004	3 202	ha
- Vegetables	2004	77 248	ha
- Cotton	2004	78 161	ha
- Tobacco	2004	2 649	ha
- Sunflower	2004	11 381	ha
- Other annual crops	2004	236 780	ha
• Permanent crops: total	2004	101 407	ha
- Tea	2004	3 658	ha
- Other perennial crops (bananas, olives, grapes,	2004	97 749	ha
Irrigated cropping intensity (on full/partial control irrigation equipped area)	2004	97.6	%
Drainage - Environment			
Total drained area	2003	608 336	ha
- part of the area equipped for irrigation drained	2003	608 336	ha
- other drained area (non-irrigated)		-	ha
• drained area as % of cultivated area		-	%
Flood-protected areas		-	ha
Area salinized by irrigation	2003	635 800	ha
Population affected by water-related diseases		-	inhabitants

FIGURE 4
Type of irrigation
Total 1 453 618 ha in 1995

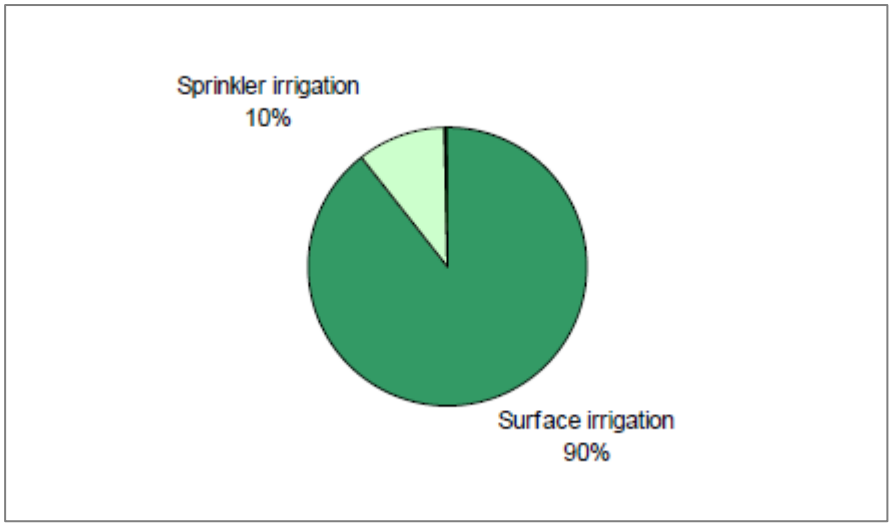
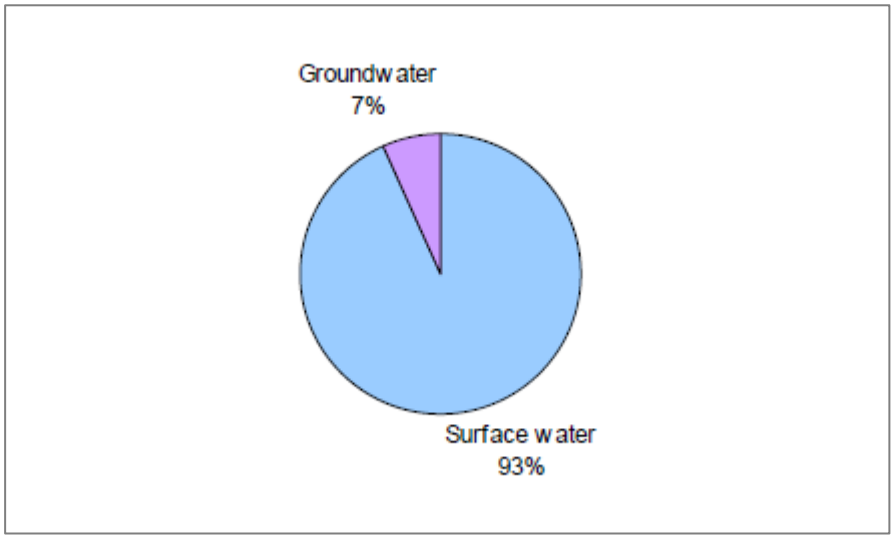
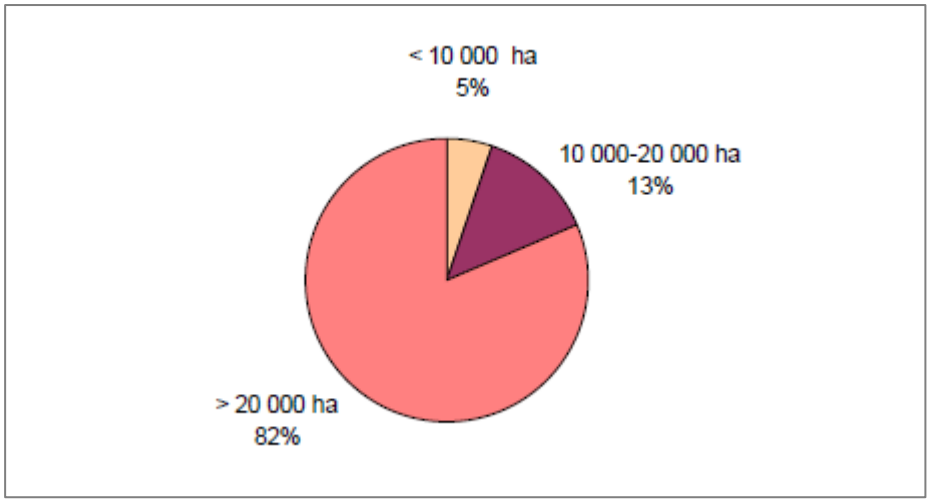


FIGURE 5
Source of irrigation water
Total 1 453 700 ha in 1995



In 1995, small schemes (<10 000 ha) covered 5.3 percent of the total area equipped for irrigation, medium size schemes (10 000–20 000 ha) 13.3 percent and large schemes (>20 000 ha) 81.5 percent (Figure 6). Most schemes were state-owned. Farmer-owned irrigation started to appear in 1992 and in 1996 represented 1 percent of the area.

FIGURE 6
Type of irrigation schemes
Total 1 453 020 ha in 1995

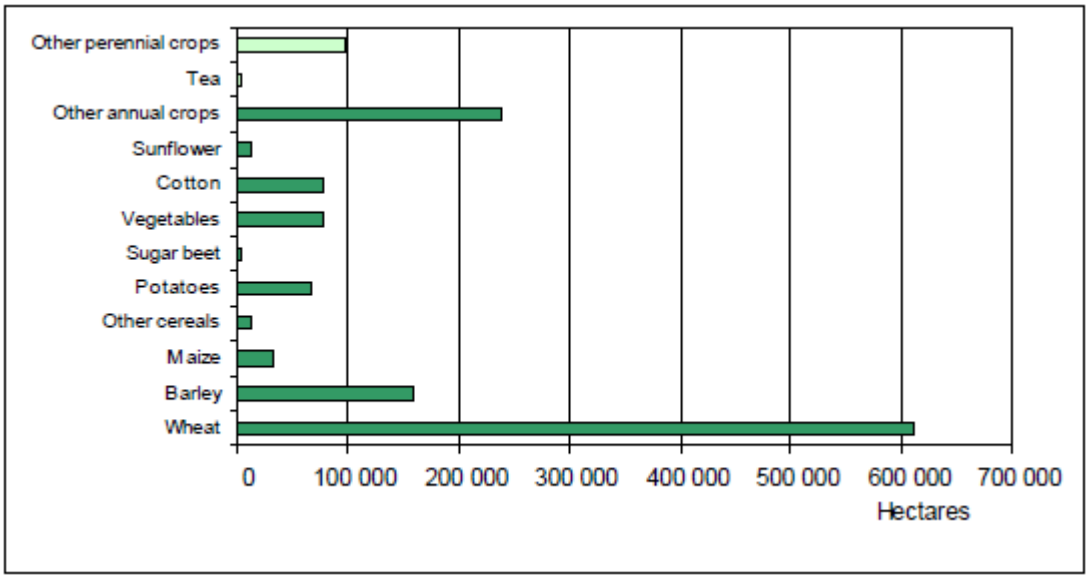


In 2003, the total area equipped for irrigation was about 1 426 000 ha and the power-irrigated area was estimated at 479 249 ha.

Role of irrigation in agricultural production, the economy and society

In 2004, the harvested irrigated area was 1 391 521 ha. Annual crops represent 93 percent of this area and permanent crops 7 percent. The main irrigated crops are wheat (44 percent), barley (11 percent), cotton (5.6 percent) and vegetables (5.6 percent), while the most important permanent crops are tea, bananas, olives, grapes and strawberries (Figure 7).

FIGURE 7
Irrigated crops
Total harvested area 1 391 521 ha in 2004 (cropping intensity on actually irrigated: 97.6%)



Status and evolution of drainage systems

The total drainage network covers 608 336 ha, all in the areas equipped for irrigation. In more than half the drained area the installations need to be renovated. In 2003 the area salinized by irrigation was estimated at 635 800 ha (Table 4).

WATER MANAGEMENT, POLICIES AND LEGISLATION RELATED TO WATER USE IN AGRICULTURE

Institutions

The main institutions involved in water management are all state institutions. They are:

- the Ministry of Ecology and Natural Resources, which has overall responsibility for the conservation of water resources and the prevention of pollution. It issues wastewater discharge permits, which are valid for 3–5 years. Its regional offices control and enforce discharge permits;
- the Committee on Ecology and Nature Use, which is in charge of monitoring salinization and water pollution;
- the State Committee on Amelioration and Water Management, which is responsible for monitoring water use and for issuing permits for surface water. It also levies charges for water use. The committee's activities concern mainly irrigation, for which it sets rules on water use and handles public relations. It is also in charge of land improvement on irrigated land and the operation and maintenance of the irrigation infrastructure;
- the Ministry of Health, whose Centre for Epidemiology and Hygiene is responsible for monitoring drinking water quality.

Water management

The rehabilitation of irrigation and drainage systems to ensure the sustainability of the subsector remains a priority. Major policy changes in land ownership and irrigation management play an important role in improving irrigation performance.

Control of erosion is another major issue as, according to the Ecological Committee's data, this problem affects almost 43 percent of the country. Effective measures to combat water erosion are the creation of a wood belt to protect fields, as well as wood belts along the banks of large rivers, canals and reservoirs.

There are several problems affecting the irrigation infrastructure (UNECE, 2004). They include:

- deterioration of infrastructure and pumping equipment due to insufficient maintenance;
- heavy reliance on pumped irrigation, which in many instances would make agriculture uneconomic if the energy were valued at its real cost;
- negligible contribution from users to operation and maintenance expenses;
- inefficient water distribution and application.

As a result of recent efforts to improve the situation, institutional mechanisms have been established for the collection and use of water charges and the transfer of responsibility to water users. It is estimated that 40–45 percent of the irrigation infrastructure is in need of renovation. The inefficient use of water and the heavy water losses in irrigation represent major problems for water resources and soils.

Finances

Since 1997 water used for agricultural purposes is chargeable. Rates were changed in June 2003. The fee is charged for technical-operational costs and not for the use of water as a natural resource.

Charges on wastewater discharge were also introduced in 1992. The rates are very low, as is the collection rate, making the charge system less effective (UNECE, 2004).

The Presidential Decree of 23 October 2004 authorized the establishment of a public corporation "Agroleasing" and a series of measures to develop leasing in the agricultural sector. It was decided to provide AZM100 billion and 150 billion from the state budget in 2005 and 2006 for Agroleasing's activities (Heydar Aliyev Foundation. 2008).

Policies and legislation

The water sector is regulated by the following legislation:

- The Water Code (1997)
- The Law on Water Supply and Wastewater (1999)
- The Law on Amelioration and Irrigation (1996)
- The Law on Environmental Protection (1999)

The Water Code is the basis for water management in Azerbaijan and sets out the following main principles for use and protection:

- economic development and environmental protection;
- provision of the population with quality water;
- water management to be based on river basins;
- water protection functions to be separate from water use and water industry functions.

The Law on Water Supply and Wastewater sets the legal framework for this sector.

The Law on Amelioration and Irrigation regulates the planning, design, construction and operation of amelioration and irrigation systems. Accordingly, design and construction activities require special permits (licences) and systems have to be certified with technical passports.

The Law on Environmental Protection identifies the legal, economic and social bases of environmental protection. It governs the use of natural resources, amongst which water, and protection against domestic and industrial pollution. The Law also sets the basis for economic mechanisms, such as payment for the use of natural resources and for the disposal of domestic and industrial waste and economic incentives for environmental protection.

In July 1996, a land reform law was adopted by the National Assembly (Milli Majlis), establishing private property rights to land. The land is to be transferred to all rural inhabitants free of charge. It can then be sold freely, exchanged, transferred by right of succession, leased or used as mortgage security.

In November 2003, the presidential decree “On intensification of the socio-economic development in the Republic of Azerbaijan” envisioned the start of the second stage of the agrarian reforms and the accomplishment of appropriate activities. It has been followed up by the state programme for socio-economic development of the regions of the Republic of Azerbaijan (2004-2008), adopted on 11 February 2004. The implementation of the programme will create the opportunities for radical changes and wider business development in agriculture. Among other activities, the state programme will restore agricultural processing enterprises, establish new production enterprises, increase the efficiency of local resources, build or modernize the infrastructure for regional development, step up the second stage of agrarian reforms, establish technical service centres in the region, and extend seed depots and other important activities (Heydar Aliyev Foundation. 2008).

ENVIRONMENT AND HEALTH

Water losses in the irrigation distribution systems, estimated at 50 percent, cause waterlogging and salinization. Moreover, only 600 000 ha of irrigated land, the most naturally saline areas, have drainage. The increased water level of the Caspian Sea has also made land on the coast more saline. Salinization is particularly widespread on the Kura-Araks lowland (UNECE, 2004).

The rapid development of all spheres of economics and human activity has had an increasingly negative impact on the environment, partly due to the inefficient use of natural resources. Like many other

countries, Azerbaijan is interested in finding solutions to the problems of environmental protection and rational utilization of natural resources. In support of the country's environmental protection goals, a number of important laws, legal documents and state programmes, all conforming to European law requirements, have been approved.

Almost 30 percent of the Caspian Sea coastal area is exposed to contamination. More than half of the rivers more than 100 km long are considered to be contaminated. All the lakes of the low-lying parts of the country are exposed to the changes in the thermal, biological and chemical regimes. The lakes of the Apsheron Peninsula and the Kura Araks Lowland, covering a total area of more than 200 km^2, are in a critical state. The main sources of contamination of water resources are industry, agriculture, the municipal sector, energy, heating and recreation (UNEP/GRID-Arendal, 2005).

Irrational use of water resources and pollution of water bodies can be put down to the fact that cities, regional centres and other human settlements are poorly equipped with sewerage systems and wastewater treatment facilities, as well as to the obsoleteness of the existing technical facilities. Untreated wastewater released from Baku, Ganja, Sumgayit, Mingacevir, Ali-Bayramli, Nakhchivan and other urban centres significantly contributes to the pollution of the water bodies.

PROSPECTS FOR AGRICULTURAL WATER MANAGEMENT

Major positive factors in Azerbaijan's environmental outlook include the enactment of new legislation and the signing of international conventions. Although economic development is not advanced, the country is moving slowly in the right direction for water resources management.

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