

## THE SOCIO-ECONOMIC DEVELOPMENT OF ALGERIA AFTER 1990 IN THE CONTEXT OF SOCIAL UNREST, TERRORIST ATTACKS AND ENVIRONMENTAL RESTRICTIVENESS

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**Abstract:** After the conquest of independence, Algeria experienced major socio-economic changes, but it also faced a civil war that has been responsible for more than 150,000 casualties. Despite the efforts made by the authorities in the direction of national reconciliation, the terrorist activities, like the one of January 2013, still feed the insecurity feeling. In its economic and social development, Algeria depends to a very large extent both on its oil fields and on the oil price on the world markets. Large public projects were started in economy, education, health, and transport infrastructure, with the revenues generated by oil and natural gas. However, the development efforts are influenced by the environmental restrictiveness, as the country is mostly a desert and water resources are scarce. Moreover, after the independence the population increased rapidly, exceeding the capacity of the state to provide enough jobs, which explains why unemployment is currently so high among young people.

**Key words:** socio-economic development, hydrocarbons, terrorist attacks

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### INTRODUCTION

Algeria is a region populated since ancient times. Initially inhabited by Berber tribes, it passed succesively under the influence of Phoenicians, Romans, Vandals, Arabs, Turks and French. The demographic and cultural profile changed substantially with the arrival of the Arabs, in the second half of the seventh century, who spread Islam and the Arabic language. After more than a century of French occupation, Algeria obtained its independence in July 1962. The period that followed was marked by serious economic and political crises that resulted in riots and coups d'état. Under the leadership of Colonel Chadli Bendjedid, who came to power in 1979, and was

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reelected in 1984 and 1988, the socio-economic conditions deteriorated significantly. The situation became even worse when the oil prices on the world market dropped significantly from 1985 to 1986. Consequently, unemployment and public discontent began to grow. In 1985, 72% of the unemployed were under 25 years old, a group estimated at 65% of the population (Janssen & Hendriks, 2012). Under the circumstances, the government was perceived as distant and corrupt, and the trend towards Islamic activism was inevitable. The waves of discontent peaked in October 1988, when the authorities used force to put an end to the riots triggered by the students and workers in Alger.

Shortly after approving a new Constitution and after the political liberalization of 1989, the Islamic Salvation Front (ISF), the main Islamist party, recorded an amazing success in the local elections in June 1990. The events that followed - the dissolution of Parliament, Bendjedid's resignation, the cancellation of elections - led to protests and mass demonstrations in several cities. The authorities responded with arrests, banned the ISF and instituted the state of emergency. All these events led to a long civil war, the periodic negotiations between the government and the Islamic rebels failing every time. The presidential elections of April 1999 were won by Abdelaziz Bouteflika, who was reelected in 2004 and 2009, the third presidential term being possible by amending the Constitution. He had a significant contribution in restoring the security and stability of the country. However, even though thousands of members of the ISF were given amnesty, the national reconciliation did not lead to the cessation of terrorist attacks.

In early 2013, Algeria came in the forefront of international debates after the terrorist attack on the In Amenas gas exploitation facilities, operated by British Petroleum group, the Norwegian company Statoil and the Algerian company Sonatrach. Thus, on January 16, 2013, several members of the Al Qaeda in the Islamic Maghreb (AQIM), who had come from Mali, occupied the In Amenas gas exploitation facilities in southeastern Algeria (figure 3) and took hostage several hundred Algerian and foreign workers. Following the intervention of the Algerian army, about 80 people lost their lives, many of them foreign workers. The Algerian officials' decision to refuse international aid in managing hostage crisis and the fact they ordered the army to open fire on the vehicles carrying hostages led to virulent reactions on international level. This terrorist attack, which was meant to be a response to the French intervention in Mali, is one of the many terrorist attacks that have occurred in Algeria over the last two decades, despite the fairly strict security measures (figure 1 and 2). According to the estimates, since 1992 the clashes between the Algerian army and the radical Islamist groups have resulted in more than 150,000 deaths (Ruedy, 2005).



**Figure 1.** Security measures  
(Source: Vasile Popa, 2006)



**Figure 2.** Security measures  
(Source: Vasile Popa, 2006)

### AIM AND METHODS

The purpose of this study is to analyze the socio-economic development of Algeria in the context of the civil war and terrorist activities that have marked the country in the last quarter of

the century. At the same time, Algeria has a very restrictive natural environment. The study relies on the analysis and interpretation of the data derived from various sources: Algérie, Office National des Statistiques, United Nations, Department of Economic and Social Affairs, Population Division, BP Statistical Review of World Energy, World Bank, U.S. Energy Information Administration. Likewise, we reviewed the literature and made observations in the field.

## RESULTS

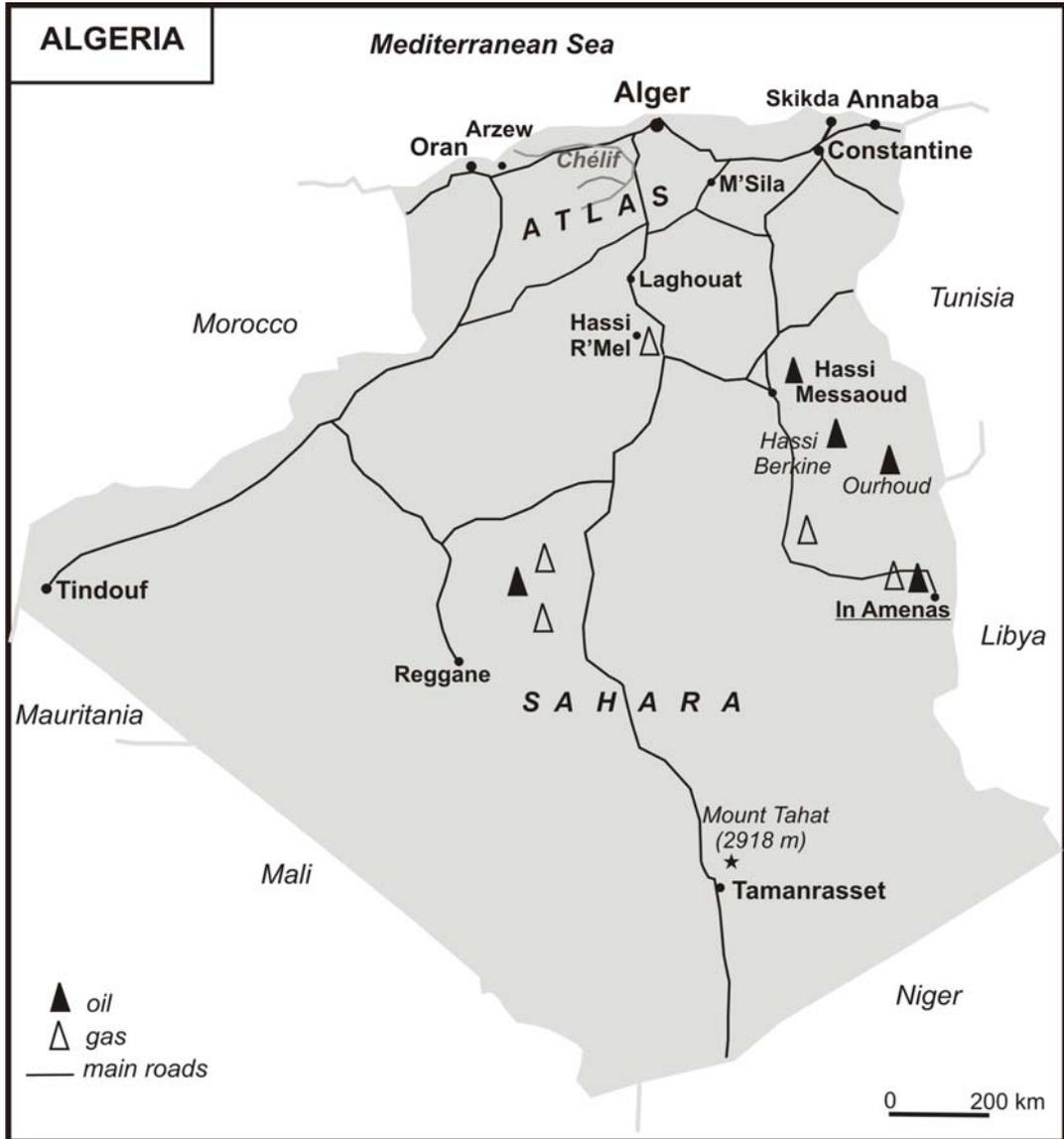
At the moment of independence, Algeria was a country strongly affected by the national liberation war, which produced many victims and caused massive destructions. In consequence, the highly qualified staff, represented especially by the French, left the country. About 70% of the indigenous population was unemployed (Oxford Business Group, 2012). After the conquest of independence, significant socio-economic changes took place, as agriculture, industry and oil exploitation (started in 1956 by the French) were nationalized. Before the discovery of oil resources, Algeria had a predominantly agricultural economy, specializing in livestock breeding (sheep, goats, camels), based on mountain pastures, as well as on cereals (wheat, barley) and vine growing. In Houari Boumedienne time (1965-1978), the economy began to be planned and centralized, focusing on industrial development. The poor state of the economy in the mid-1980s forced the state to initiate economic liberalization reforms to allow foreign investment in the hydrocarbons field, but also to seek IMF assistance (Naylor, 2006).

Despite the efforts for economic diversification - the capitalization of iron ore deposits (processed at El Hadjar, near Annaba), lead, zinc, gold, uranium and phosphate, and the establishment of production units in the field of food, textile or construction materials - Algeria's economy still depends heavily on hydrocarbons sector. This ensures 60% of the government revenues, 36% of the GDP and 97% of the exports (U.S. Energy Information Administration, 2012). The share of this sector in the GDP increased significantly in recent years, reaching 23% in 1990 (Toth et al., 1993).

In 2011, the oil reserves were 12.2 billion barrels (1.5 billion tons), 3 billion barrels more compared to 1991, which placed Algeria on the third place in Africa after Libya and Nigeria. The most important oil field is Hassi Messaoud in northern Sahara, operated by the Algerian oil company Sonatrach, which accounts for 60% of the country's reserves, with a production of 350 thousand barrels per day (U.S. Energy Information Administration, 2012). Other important oilfields are Hassi Berkine, Ourhoud and El-Merk. Generally, Algeria is the fourth African oil producer after Nigeria, Angola and Libya, with 1.7 million barrels of oil per day (BP Statistical Review of World Energy, 2012).

The proven natural gas resources are also significant, amounting to 4.5 trillion cubic meters (the second place after Nigeria), which means an increase by almost one trillion cubic meters in comparison to 1991. The largest gas field is Hassi R'Mel, discovered in 1956, which holds more than half of the reserves. Another important gas exploitation region is the Southwest (North Reggane, Timimoun and Touat fields), where Repson, Total and GDF companies have significant contributions. In 2011, the natural gas production was 78 billion cubic meters. Since oil and gas consumption is below production (table 1), Algeria is a major exporter of hydrocarbons. In 2011, it exported 750 thousand barrels of crude oil daily, especially to the USA and Europe, and 52 billion cubic meters of natural gas to Europe (Italy, Spain, France), including in liquefied form. Algeria is the third supplier of natural gas for Europe (U.S. Energy Information Administration, 2012). Arzew is the most important hydrocarbon export terminal, with about 40% of the total. Here, one can also see a large gas liquefaction plant.

With all the changes made since 1990, including a significant decrease in the share of the employed labor force from 22% to 14%, and the share of GDP from 12% to 7% (The World Bank, 2013), the agricultural sector remains underdeveloped and does not provide the necessary food for the population



**Figure 3.** Algeria – general map

**Table 1.** Algeria – hydrocarbons production and consumption (1991-2011)  
(Source: BP Statistical Review of World Energy, 2002 and 2012)

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011
Oil production (million barrels/day)	1,35	1,32	1,32	1,42	1,51	1,56	1,85	2,01	2,0	1,81	1,72
Oil consumption (thousand barrels/day)	209	210	198	187	187	198	230	250	286	327	345
Natural gas production (billion m <sup>3</sup> )	53,2	56,1	58,7	71,8	86	78,2	82,8	88,2	84,8	79,6	78
Natural gas consumption (billion m <sup>3</sup> )	17	18,6	21	20,2	21,2	20,5	21,4	23,2	24,3	27,2	28

Plant growing (wheat, barley, vegetables, citrus, olive trees, date palms) is practiced almost exclusively in the northern part of the country, while animal breeding is specific for the high plateaus of the Atlas Mountains, where natural pastures are found. Agricultural lands account for only on 17.4% of the territory, of which 3.1% is arable land (Central Intelligence Agency, 2013). As a major importer of agricultural products, particularly wheat, Algeria is exposed to the fluctuations of the global market food prices.

The significant changes that occurred in the early 1990's, including the transition to the market economy, are highlighted by the general trend of the GDP. Thus, the GDP (at purchaser's price) grew from 48 billion dollars in 1992 to 207.9 billion dollars in 2012 (The World Bank, 2013). The increase of the GDP per capita was also significant, from 1743 dollars in 1992 to 5404 dollars at present. This also influenced the unemployment rate, which dropped to about 10% in 2012 (the people under 25 years old stand for 41% of the unemployed). In the year 2000, the unemployment rate was 30%, while in 2006 it dropped to 15.7%.

**Table 2.** Algeria – The dynamics of the GDP and the GDP per capita (1992-2012)  
(Source: The World Bank, 2013)

	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	2012
<i>GDP</i> (billion dollars)	48	42,5	46,9	48,1	54	57	85	117,1	170,9	161,7	207,9
<i>GDP per capita</i> (dollars)	1743	1480	1573	1564	1727	1752	2541	3396	4786	4365	5404

In general, with a less diversified economy, dominated by the state companies and strongly dependant on the hydrocarbons sector, the socio-economic performance of Algeria was dictated by the march of the oil and natural gas prices on the world market. Besides, the socio-economic stability was also controlled by the access to and the quality of the basic services, as well as by the development of the country's infrastructure, including the housing conditions (figure 4).



**Figure 4.** Residential district under construction in Algier  
(Source: Vasile Popa, 2006)

## SOCIO-DEMOGRAPHIC EVOLUTION

With a population of around 37 million inhabitants, Algeria is an important country in the Mediterranean region. From 25 million people in 1990, the population has increased significantly in the past two decades (Office National des Statistiques, 2013). Between 2001 and 2011, the population growth rate was about 1.5% annually. Over 90% of the population is concentrated

along the coast, a strip of land representing 13% of the country. Arab-Berbers represent 99% of the population: they are followers of Sunni Islam and speak Arabic. The berbers, who are divided into several groups (Kabyles, Mozabites and Tuaregs), represent about 20% of the population (Naylor, 2006). People also speak Berber (Tamazight), which is a national language since 2002, especially in Kabylia region, east of Algiers, and French. Since 2003, Berber can be used in schools. Sahara desert is the homeland of 1.5 million nomads or semi-nomads.

**Table 3.** Algeria – main demographic indicators

(Source: Algérie, Office National des Statistiques; United Nations, Department of Economic and Social Affairs, Population Division)

<b>Demographic indicators</b>	<b>1990</b>	<b>2011</b>
Population (million inhabitants)	25	36,7
Natality (‰)	30,9	24,7
Mortality (‰)	6	4,4
Fertility (children per woman)	4,5	2,8
Life expectancy at birth (years)	66,9	76,4
Infant mortality (‰ of live births)	46,8	23,1
Age structure (%)		
0-14 years	43,1	27
15-64 years	53,3	68,4
over 64 years	3,6	4,6
Degree of urbanization (%)	52,1	73 (2010)

As a result of socio-economic development policies, life expectancy increased from 66.9 years in 1990 to 76.4 years in 2011. Likewise, birth rate, death rate (including infant rate) and fertility rate dropped, while the degree of urbanization grew (table 3). In addition, the shares of poverty, illiteracy and unemployment decreased. The literacy rate of the population less than or equal to 15 years old is 70%, of which 80% are males. In the early 1960s, literacy was about 10% (Naylor, 2006), while in 1990 it was 57.4% (Toth et al., 1993). After the independence, the national education has become a priority, and now education is compulsory for children aged 6 to 15 years. According to ERAWATCH, in 2012 the Algerian authorities allocated for education 20% of the government spending, i.e. 8.2 billion euros. In the late 1970s, one could note an Arabization policy, the Arabic being promoted as the language of education, to the detriment of French, which remained important in business, science or commerce.

Women situation has improved significantly, but the access of women to the labor market is still limited, because of the socio-cultural barriers. According to Amnesty International, in Algeria still pose restrictions on the freedom of expression, association and assembly, and women are victims of discrimination in law and real life. The Family Code does not promote equal rights with men in marriage, divorce, child custody and inheritance.

### **ENVIRONMENTAL RESTRICTIVENESS**

Algeria has a very large surface area of about 2.4 million km<sup>2</sup>, the largest in Africa, but much of it, about 85%, is desert. Some environmental problems, such as soil degradation (erosion, salinisation, loss of nutrients, desertification), stemming from overgrazing and other agricultural practices, affect agricultural land. The northern part of Algeria, located on the contact between Eurasian and African plates, is frequently affected by earthquakes, such as those of October 10, 1980, and May 21, 2003, which caused thousands of casualties and great damage.

An essential role in the configuration of geographical landscapes is played by the Atlas Mountains, which dominate by height and orientation, thus having a major climatic role. Consequently, they generate rainfall in the north and stop the dry and hot tropical air coming from

the south. Under the circumstances, one can note significant differences between coastal and inland regions. The Mediterranean coast, low and fertile, concentrates most of the population and the main cities (figure 3). The valleys and the slopes of the Tellian Atlas are also intensely exploited. These mountains, which have heights of 2300 m and varied petrographic structure, display steep slopes, deep valleys and sharp ridges. South of the Tellian Atlas, the topography consists of high plateaus with altitudes of 700-1000 m, comprising a number of closed basins occupied by salt lakes (chott), like Ech-Chergui and Chott el Hodna (figure 5).



**Figure 5.** Chott el Hodna – Land with Solonchaks  
(Source: Oprea, 2006)



**Figure 6.** Landscape in northern Sahara  
(Source: Vasile Popa, 2006)

Because these plateaus are sheltered, precipitation is scarce, 100-400 mm per year, Calcisols are predominantly and vegetation is represented by steppe grasslands, excessive grazing. Besides Calcisols are Gypsisols (poor in humus and nutrients) and Solonchaks (used as low productive meadows). The Saharan Atlas, bordering the Sahara, is more than 2,300 m high and has a predominantly arid environment. The southern slopes are steep and dissected by wadies. Sahara, which is made of huge dunes, rocky plateaus and mountains (Figure 6), with Arenosols or Leptosols, has the most arid climate, recording less than 100 mm annual rainfall (table 4). Here lies the country's highest elevation, Mount Tahath (2918 m).

**Table 4.** Mean monthly precipitation (1976-2005)  
(Source: World Weather Information Service, World Meteorological Organization)

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Alger	81,4	72,7	55	58,4	41,9	8,5	4,5	8,2	28,3	58,8	89,6	91
Djelfa	36,2	26,8	27	28,8	33,9	19,6	9,8	18	30,4	27,5	29,7	30,2
Ghardaia	8,2	4,8	8,7	6,8	4	2,5	0,7	3,1	11,4	7,3	12,1	5,4
Tamanrasset	2,4	1,5	5,2	2,1	5,1	7,1	5,1	8,1	7,7	6,8	0,8	1,7

The coastal plain and the Tellian Atlas receive the highest amounts of rainfall (600-1000 mm per year, especially in the east) and consequently display the richest vegetation and the largest cultivated land. The forest area, which is extremely confined in Algeria (0.6%), is almost entirely located here, being composed of plantations and natural forests (*Quercus ilex*, *Quercus suber*, *Acer campestre*, *Cedrus atlantica*, *Pinus nigra*, *Pinus halepensis*, *Abies numidica*).

Providing the necessary water for the population and agriculture (the main water consumer) is a big problem in Algeria. Perennial streams appear only in Atlas (Chelif, Isser, KSOB, Rhumel, Chiffa), but they are few and generally short and their discharge varies according to the seasons. Winter rains result in the highest discharges. Sixty-eight dams for water storage and a number of seawater desalination plants were built (Maagta, Hamma, Fouke), but these have only partially solved the water problem. According to METAP, water availability is 19.3 billion cubic meters per year, of which 12.4 billion cubic meters is surface water and 6.9 billion cubic meters is groundwater. Average water availability has reached a critical threshold, estimated at around 500 cubic meters per capita per year, representing about half of the minimum threshold set by the World Bank (Maliki et al., 2009).

## CONCLUSIONS

Despite the difficulties caused by the civil war and terrorist activities, in the last quarter century Algeria has seen significant socio-economic changes. However, these changes largely depended on the rich hydrocarbon deposits. In this regard, given that the economy is less diversified, Algeria is very vulnerable to oil price developments on the world market. In addition, the development efforts are influenced by environmental restrictiveness and the high rate of population growth.

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