# 2019

ALGERIA

Structural transformation, employment, production and society STEPS

United Nations Economic Commission for Africa

## ALGERIA

Structural transformation, employment, production and society STEPS





Ordering information To order copies of *Structural transformation, employment, production and society (STEPS) profile -Algeria,* please contact: Publications and Conference Management Section Economic Commission for Africa P.O. Box 3001 Addis Ababa, Ethiopia

Tel: +251 11 544-9900 Fax: +251 11 551-4416 E-mail: eca-info@un.org Web: www.uneca.org

To download free electronic copies of ECA publications, please visit: www.uneca.org/publications

© 2020 Economic Commission for Africa Addis Ababa, Ethiopia All rights reserved First printing: June 2020

Material in this publication may be freely quoted or reprinted. Acknowledgement is requested, together with a copy of the publication.

#### Note

The designations used and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Economic Commission for Africa (ECA) concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as "developed", "industrialized" and "developing" are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process.

## Content

Definition of structural transformation Acknowledgements		iv
		viii
1.	Overview	1
2.	Background	3
3.	Production	7
	3.1 Diversification	7
	3.2 Links	12
	3.3 Technology	14
	3.4 Summary	17
4.	Employment	18
	4.1 Labour productivity	18
	4.2 Decent work	20
	4.3 Education and skills	22
	4.4 Summary	25
5.	Society	27
	5.1 Demographics	27
	5.2 Health	29
	5.3 Poverty and inequality	31
	5.4 Summary	32
6.	Key messages	34
References		36

#### **Definition of structural transformation**

The Economic Commission for Africa defines structural transformation as the fundamental changes in economic and social structures that advance inclusive and sustainable development<sup>\*</sup> This definition addresses three key questions:

- a) What is structural transformation? It is a fundamental and multidimensional process observed in all countries reaching high levels of development;
- How is it achieved? It requires profound economic and social transformation, such as economic diversification and technological upgrading, the creation of decent and productive employment and equitable social welfare;
- c) Why does it matter? It is crucial for implementing the 2030 Agenda for Sustainable Development and Agenda 2063: The Africa We Want.

Within the core objective of accelerating structural transformation (ST), there are three inherent dimensions to be assessed: employment (E), production (P), and society (S). This speaks directly to the need to fundamentally change economic and social structures, with employment playing a key role in linking economic growth (production) and social development (society), in both directions. It is useful to keep in mind the ultimate objective of the analytical framework, namely, to achieve inclusive and sustainable development through accelerated structural transformation. Hence, structural transformation, employment, production and society for sustainable development (STEPS 4 SD) is the framework that shapes the design and implementation of the profiles (see figures I and II).

# **Figure I:** Structural transformation, employment, production and society for sustainable development (STEPS 4 SD)

	Employment	Production	Society
STEPS 4 SD	Labour productivity Decent work	Diversification Linkages	Demography Health
	Education and skills	Technology	Poverty and inequality

Within each of the three dimensions considered, there are three outcome areas that are crucial to accelerate structural transformation. With regard to production, the attention is on (supporting) diversification, (strengthening) linkages and (upgrading) technology. For employment, the focus is on (increasing) labour productivity, (promoting) decent work and (enhancing) education and skills. With respect to society, the emphasis is on (managing) demography, (improving) health and (reducing) poverty and inequality. For each outcome area,

<sup>\*</sup> The terms "structural transformation" and "structural change" are often used interchangeably. Narrow definitions are centred on the measurement of the economic gains accrued by shifting labour from lower-productivity to higher-productivity sectors, while broader definitions go beyond shifts in economic structures, such as production and employment, by also encompassing within-sector productivity improvements and changes in other aspects of society. For the purposes of the present document, the use of structural change is avoided and a broad perspective, as described by the STEPS framework, is adopted.

there is a set of core outcome indicators. They illustrate the results (outputs) that are expected to be observed in order to accelerate structural transformation. These are complemented by other metrics pertaining to the relevant outcome area. Given that structural transformation is a gradual process, indicators are tracked over a long period of time: from 20 to 25 years, whenever possible. Below is a brief rationale for each outcome area.

#### Diversification

Economic diversification is a key feature of countries that have achieved high levels of development. Concentrated economic structures undermine structural transformation by promoting rent-seeking (in mining) and commodity traps (in agriculture). They are also typically associated with high vulnerability to price and demand shocks. Expanding the range of goods and services that are produced and exported, especially towards higher value addition, is therefore an important factor behind structural transformation.

#### Linkages

Deeper integration into the global economy can contribute to increased value addition and productivity growth, especially through participation in global value chains. A more interconnected economy, with strong backward and forward linkages throughout sectors and firms, can also help to overcome critical structural constraints, sustain economic gains and encourage innovation.

#### Technology

Technological progress is a catalyst for structural transformation. The creation, improvement, and adoption of technologies contributes to accelerating productivity growth and adding value to production processes. Technological change can be supported through the development of domestic technological capabilities and/or through the importation of foreign technologies, such as those embedded in foreign investment.

#### Labour productivity

Labour productivity is at the heart of structural transformation. In fact, the academic literature often measures structural transformation as the economic gains accrued by shifting labour from lower-productivity to higher-productivity sectors, also known as between-sector effects, as opposed to within-sector productivity improvements. Positive employment dynamics are therefore necessary to generate these benefits. Labour productivity not only depends on skills and health, from the worker's perspective, but also relies on existing technology and other firm-related characteristics. It is therefore central to this framework. Crucially, labour productivity improvements are necessary to enable economic (and household income) growth and thus help to raise living standards.

#### **Decent work**

Decent work entails employment opportunities that provide reasonable levels of remuneration, security and safety. Precarious work conditions, such as low pay and job insecurity, are a key obstacle to raising living standards and often undermine labour productivity. Creating decent work opportunities is critical to engender positive structural transformation, given that economic and social structures may change in ways that do not always promote sustainable development.

#### **Education and skills**

An educated and skilled workforce is critical to accelerate structural transformation. Formal and informal education systems provide a range of skills for work and life. In particular, improved skill levels facilitate the reallocation of labour towards higher-productivity sectors. Enhancing demand-driven and work-relevant skills is key to reducing existing skill gaps and mismatches.

#### Demography

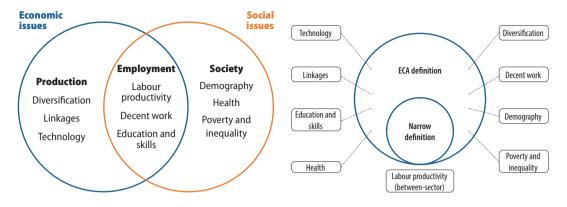
Demographic change can boost structural transformation through the considerable impact that it has on the economy and society. For example, changes in the age composition of the population can yield a significant demographic dividend by easing the economic burden on the working-age population. Urbanization and migration can also produce large economic benefits, although they may also entail significant costs if not adequately managed.

#### Health

A healthy workforce is central to expanding human capital and enhancing structural transformation. A high prevalence of diseases and other medical conditions undermines economic activity and labour productivity, especially through its impact on an individual's physical and emotional well-being.

#### **Poverty and inequality**

Poverty often undermines access to nutritious foods, health care, education and jobs, which, in turn, leads to malnutrition, a high disease burden, low skills and underemployment. Moreover, inequality contributes to economic, social and political instability, which curtails economic growth. Poverty and inequality can therefore prevent people from fully contributing to the transformation of economic and social structures.



#### Figure II: Economic and social issues relating to structural transformation

#### Data considerations/implications

When compiling data for the profiles, preference was given to official national sources, such as national statistics offices, central banks and government ministries. It should be noted, however, that data collected from national sources may not be comparable among countries owing to the use of different terminology, methods and classification systems. International sources were therefore used whenever national data either were not available or there was a need to contextualize the analysis with cross-country comparisons. The use of harmonized data from international sources, such as those produced by many United Nations agencies, is key to enabling consistent comparisons among countries. Whenever feasible and pertinent, data have been disaggregated by age, gender and location. Given that structural transformation is a gradual process, the analysis tracks changes over a relatively long period, usually by contrasting values or averages for the periods 1990-1999 and 2000-2009 with those for 2010 onwards.

## Acknowledgements

The main objective of the structural transformation, employment, production and society (STEPS) profiles is to produce country-specific data analysis and policy recommendations for structural transformation that will promote sustainable development. They are produced by the subregional offices of the Economic Commission for Africa (ECA).

The lead author of the Algeria profile was Zoubir Benhamouche, Economic Affairs Officer at the ECA Subregional Office for North Africa, with the contribution of Mohamed Yazid Boumghar, researcher at the Applied Economics for Development Research Centre (CREAD), in Algeria. The report has benefited from comments by Lilia Hachem Naas, former Director of the ECA Subregional Office for North Africa.

A special mention also goes to the ECA Publications and Conference Management Section for editing, translating, designing and printing this profile.



## **Overview**

From an average of 1.6 per cent during the 1990s, the GDP growth rate rose to an average of 3.7 per cent between 2000 and 2014. This period has been marked by a significant catch-up in infrastructure construction. Capital expenditure increased from 20 per cent of government expenditure in the late 1990s to 40 per cent between 2006 and 2014. Over this period of prosperity driven by high oil prices, public spending rose sharply. Personnel and social expenditure, consisting mainly of subsidies (food, energy, housing), has been an important factor behind the rise in public spending, in particular from 2011 onwards, reaching its highest level in 2015, at 45.8 per cent of GDP.

With the sharp fall in oil prices in 2014 and the persistence of this shock, the sustainability of the country's growth model has been threatened by the rapid deterioration in public finances and the current account balance. The budget balance showed a deficit of -15.3 per cent in 2015, reduced successively to -13.2 per cent in 2016 and -8.8 per cent in 2017. The current account balance, positive until 2014, fell from -4.4 per cent in 2015 to -16 per cent in 2016.

With the fiscal adjustments made by the Government to offset the deterioration in public finances, growth slowed in 2017 to 1.6 per cent, compared to an average of 3.4 per cent during the period 2010–2016. Accordingly, public investment efforts have not had the desired effect on the country's endogenous development capacities. Moreover, private investment has not taken over from public investment; it is barely above 10 per cent of total investment. The industrial sector, excluding hydrocarbons, remains underdeveloped, contributing less than 5 per cent to GDP. Non-hydrocarbon exports have not diversified and their share in total exports is less than 5 per cent, while hydrocarbon exports are declining.

Faced with this situation, and with demographic pressure posing major challenges, in particular for job creation, Algeria must speed up its structural transformation.

**Production:** The structural transformation of North Africa is very slow. The contribution of the hydrocarbon sector is the central pillar of economic growth. Non-hydrocarbon industry accounts for less than 15 per cent of the country's value added. The weakness of the industrial sector is reflected in the relatively unsophisticated level of the economy and exports, as

measured by the Economic Complexity Index. Algeria thus ranks 89th out of 127 countries. In addition to the low weight of non-hydrocarbon exports, Algerian exports are limited to some 100 products, compared to between 200 and 230 for Morocco and Tunisia.

**Employment:** The structure of employment has improved in the service sector. The agricultural sector's share of employment almost halved between 1990 and 2018, dropping from 20.1 to 10.4 per cent. At the same time, the share of industry declined slightly, from 15.5 to 13.5 per cent. Employment in trade and services increased its share, from 50 to 58.9 per cent. The share of market services doubled over a period of eight years, rising from 13 per cent in 2010 to 26 per cent in 2018. It should be noted, however, that services are dominated by low value-added activities, primarily related to freight transport and trade. For a long time, job creation was achieved at the expense of permanent employment. While the share of permanent employees constituted 47 per cent of jobs in 1997, it fell to 38 per cent in 2018. Moreover, over the period 2001–2014, informal employment accounted for slightly more than 40 per cent of the activities of the total labour force.<sup>1</sup>

Overall productivity did not improve significantly, with contrasting results across sectors. Between 1991 and 2016, growth in apparent labour productivity rose to an average of 5 per cent for agriculture, 3 per cent for services and 2 per cent for industry. Total productivity growth averaged a mere 1.11 per cent over the period. Structural transformation contributed very little to overall productivity growth, which was mainly driven by an increase in intra-industry productivity in the agricultural and service sectors.

**Society:** While Algeria began its demographic transition in the mid-1980s, a reversed transition was observed in the 2000s. In 2017, for the fourth consecutive year, the number of live births exceeded 1 million, up from 580,000 in the early 2000s. According to the latest population projections, the country's population is expected to reach 53 million in 2030, compared to less than 42 million in 2017. In terms of health, between 2000 and 2015, Algerians gained 5.4 years in life expectancy, and 4 years in healthy life expectancy, improving from 61 to 65 years. As a result of per capita GDP growth and a very generous redistribution system, income inequalities have been considerably reduced, with the country's Gini index improving from 35.3 in 1995 to 27.6 in 2011.

Generally speaking, Algeria is struggling to begin the structural transformation of its economy, whose major pillar remains the hydrocarbons sector. Revenues from this sector have been instrumental in financing infrastructure and human development expenditures. That said, the Algerian development model seems to have reached its limits. The country is called upon to launch structural reforms in order to accelerate private sector development, increase labour productivity and diversify its productive base.

<sup>1</sup> National Statistical Office, 2016. "Enquête emploi auprès des ménages 2014" ("Household employment survey 2014"), *Collections Statistiques No. 198, Série S: Statistiques Sociales*, February, page 31.

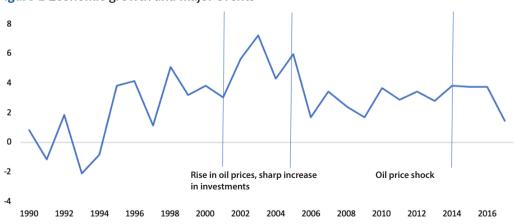


## Background

Algeria is located in North Africa. It has a Mediterranean coastline and an immense inland desert, the Sahara. The country was subjugated by various colonial empires, in the run-up to its independence in 1962. Its population, measuring 41.7 million in 2017, is predominantly Muslim. Algeria is the fourth largest economy on the African continent, and the second largest in the North African subregion, behind Egypt.<sup>2</sup>

After a decade in the 1990s marked by security and economic difficulties, Algeria has gradually worked towards and regained security stability and entered upon the path of growth. This has been attributable, among other factors, to the upturn in oil prices, which has made it possible to finance an ambitious catch-up programme in terms of infrastructure and a generous social system. Per capita income is \$4,123 (2017), placing Algeria in the upper middle-income bracket.

The 1986 oil crisis revealed the structural weaknesses of the economy and paved the way for reforms, which can be broken down into two phases. The first phase, between 1987/88



#### Figure 1 Economic growth and major events

Source: Algeria National Statistical Office, 2017; statistical data.

<sup>2</sup> World Bank, 2017. In terms of nominal GDP, in United States dollars.

and 1991, saw the implementation of important liberalization reforms, both economic and political. The fall in the price of oil severely affected the country's economy, causing a 55.5 per cent drop in nominal exports between 1984 and 1987. This led to a significant decline in growth, which dropped to 1 per cent in 1989, compared with an average of 5 per cent between 1980 and 1985, an increase in external debt, which reached 45.7 per cent of GNP in 1988, and social unrest. The reforms put in place in 1989 were aimed at moving Algeria towards transition to a market economy, with a gradual process of reforms aimed at eliminating the distortions induced by a planned economy. The reform process was interrupted by the political crisis of the early 1990s. In 1992, the debt-service-to-exports ratio reached 75 per cent, compared with 36 per cent in 1986. The rise in external debt led to a balance of payments crisis, which prompted Algeria to turn to the International Monetary Fund (IMF). The Bretton Woods institutions then imposed a structural adjustment plan, intended to bring the country into its second period of reforms aimed at liberalizing the economy.

With the rise in oil prices during the 2000s, up to 2014, Algeria had significant financial capacity, which enabled it to carry out large-scale public investments. The upturn in oil prices between 2000 and 2014 enabled Algeria to garner significant financial resources and finance ambitious development programmes, including infrastructure projects (such as the East-West highway) and the implementation of two recovery and growth support plans (2002–2004 and 2005–2009), with a total budget in excess of \$180 billion. These plans were followed by a five-year plan (2010–2014) with a budget allocation of \$286 billion and another plan (2015– 2019) with a projected allocation of \$262 billion. All these economic stimulus packages have focused on capital spending. The share of capital expenditure in total government expenditure increased from below 20 per cent in the late 1990s to over 32 per cent on average in the period 2000–2005, and to 40 per cent in the period 2006–2014. Total public spending grew from 1,178 billion dinars in 2000 to 6.996 billion dinars in 2014 (from \$15.6 billion to \$86.8 billion at 2020 rates). The significant increase in budgetary allocations to support the country's economic and social development did not challenge the sustainability of public finances as long as the price of oil remained high. At the same time, however, the sharp drop in oil prices, with the price of oil per barrel falling from an average of over \$111 in 2011 to less than \$55 by the end of December 2014, exposed the vulnerability of the Algerian economy. It remains heavily dependent on the hydrocarbons sector, which accounts for an average of almost 35 per cent of GDP and finances 60 per cent of the State budget. The increase in resources has also enabled the country to finance human development programmes, with remarkable results. The national human development index fell from 0.577 in 1990 to 0.754 in 2017.

Yet these investment efforts have not yielded sufficient returns in terms of creating endogenous development capacities. The country has been unable to launch a structural transformation of its economy capable of freeing it from this dependence: industry represents less than 5 per cent of GDP (compared to 10 per cent in the mid-1990s) and hydrocarbon exports more than 95 per cent of total exports. Moreover, the growth of the services sector (in particular

trade and transport, which contribute a significant share of GDP growth), is also dependent on public expenditure, and ultimately on the hydrocarbons sector.

With the fall in oil prices in 2014, public finances began to deteriorate. The public treasury deficit grew from -4 per cent of GDP in 2010 to -17 per cent in 2015. The Government has made fiscal adjustments to address the decline in oil tax revenues, bringing the budget deficit to -13.2 per cent of GDP in 2016 and -8.8 per cent in 2017. With the persistence of low oil prices, however, the adjustments made have proved insufficient to reduce the budget deficit to a sustainable level. The Government has therefore decided to resort to non-conventional financing, in the form of the issuance of treasury bills purchased by the Bank of Algeria, for an amount of 570 billion dinars for the year 2017 (approximately \$4.6 billion). Faced with the deterioration of public finances, the country has also developed a "Vision 2030", with sustainable development objectives for 2030. This Vision is based on a new development model, designed in particular to rationalize public expenditure. Social transfers and personnel costs take a heavy toll of public finances, while private investment has not taken over from public investment. The new development model aims, first, to revive development planning within the framework of "liberal interventionism"; second, to strengthen the governance capacities of the State's economic administrations; third, to place the enterprise at the centre of economic policy and to broaden the application of performance criteria in the management of large national enterprises; and, fourth, to institute a process of public policy evaluation.

Vision 2030, which was developed in 2015 and is underpinned by the country's new growth model, aims for export growth at an annual rate of 18 per cent over the period 2015–2030, with priority assigned to the continent of Africa. Where regional integration is concerned,

#### Goals of Vision 2030

Vision 2030 aims to place Algeria on a sustained path of non-hydrocarbon GDP growth of 6.5 per cent per year over the period 2020–2030, opening the door for economic diversification based on productivity growth, import substitution and promotion of non-hydrocarbon exports.

In terms of the structural transformation of the economy, several goals are targeted:

- A significant growth in income with a 2.3-fold increase in per capita GDP over the course of 15 years, rising from \$3,890 in 2015 to \$8,720 in 2030;
- The doubling of manufacturing value added as a proportion of GDP, from 5 per cent in 2016 to 10 per cent by 2030;
- Modernization of the agricultural sector in order to achieve the objective of food security and realize its potential for export diversification;
- An energy transition that will make it possible, among other outcomes, to halve the annual growth
  rate of internal energy consumption (from 6 per cent per year in 2015 to 3 per cent per year by 2030),
  thanks to an energy efficiency policy and the development of renewable energies. The aim is to bring
  about a change in the structure of consumption by charging a fair price for energy, so that only what
  is strictly necessary for development is extracted from the subsoil. This should ensure a sustainable
  asset for future generations;
- Diversification of exports to support the financing of economic growth in the face of the expected depletion of hydrocarbon resources over the period.

Algeria is poorly integrated with the rest of the continent. Algerian exports are mainly composed of hydrocarbons. In 2017, sub-Saharan Africa accounted for only 0.43 per cent of the country's total exports, and the Middle East and North Africa region for only 5.99 per cent. The share of imports from sub-Saharan Africa was a mere 0.40 per cent, and that from the Middle East and North Africa region only 4.66 per cent. Algerian imports from Europe and Asia accounted for 78.86 per cent of the country's total imports.

In addition, a national export strategy is being developed to accelerate export diversification. This strategy, designed in a consultative manner, identifies cross-cutting public policies, but also targeted measures for priority sectors, taking into account their development potential. In an initial phase, four sectors have been selected for specific support: food processing, pharmaceuticals, electronic components and information and communications technologies (ICT).

## Production

### 3.1 Diversification

The Algerian economy remains dominated by the hydrocarbons sector, which accounts for a third of the value added. Over the period 2000–2009, this share was close to half of the country's GDP (47 per cent). With the fall in oil prices, which began in the summer of 2014, the reduction in the hydrocarbon sector's share of GDP has benefited the services sector more than agriculture and manufacturing, the traditional driving forces of structural transformation. At the same time, these two sectors have benefited most from upgrading programmes and public subsidies over the last ten years.

The agricultural sector benefited from a five-year support programme over the period 2010–2014, which pursued a number of objectives, including: increased production of widely consumed products (including durum wheat and milk); the wide provision and extension of agricultural irrigation systems, to cover 1.6 million hectares by 2014; the modernization of farming methods; and the implementation of the SYRPALAC agricultural consumer goods regulation system and its application to certain products (cereals, milk, meat, vegetables and others). It was hoped to achieve a growth rate of more than 8 per cent in the agricultural sector over the period 2010–2014. In the end, the rate only reached 7 per cent. Over the last three years this growth rate has dropped by almost half, to 4 per cent. Nevertheless, a reduction in growth volatility has been observed, thanks in particular to the introduction of modern irrigation techniques and more rational management of crop routes.

Field crops are always dependent on rainfall and climate conditions. Algeria is the world's third largest importer of wheat and milk powder, after Egypt and Indonesia for wheat and China and Viet Nam for milk powder. Where these products are concerned, the goal of reducing imports could not be achieved. For wheat, imports (by volume) increased by more than 8 per cent after the introduction of this programme. For milk powder, imports almost doubled. To remedy this problem, an action plan called "Fellagha 2019" was launched in 2016, with a target date of 2019 (see box below). The first results show that the third pillar of the action plan (aquaculture) is the one performing best. The goals of reducing imports (over \$2 billion) and increasing agricultural exports (\$1.1 billion) have not yet been achieved.

Owing to the predominance of hydrocarbons in the structure of GDP and in exports, Dutch disease has had a particularly adverse impact on the country's manufacturing sector. Prior to 1999, the share of manufacturing industries in gross value added was 13 per cent. Between 2010 and 2016, this rose to 14 per cent, after dropping to 10 per cent between 2000 and 2009. The private sector still extensively dominates four of the seven branches of industry. For all branches as a whole, the share of the private sector stands at 65 per cent. This increase in the share of the private sector is due more to the withdrawal of the State than to any dynamism inherent in the private sector itself, despite the various programmes set up to support the development of the private sector and ensure its upgrading (such as those of the European Union, African Development Bank, World Bank, United Nations Industrial Development Organization and others).

Over the recent period (2010–2017), the manufacturing sector has only registered growth of 4 per cent. Growth in the building and public works sector declined to 6 per cent, with the slowdown in public investment.

Over the last 20 years, the market services sector has recorded very strong growth, just behind the construction and public works sector.<sup>3</sup> Non-market services are growing at roughly the same pace as manufacturing.<sup>4</sup> These non-market services continue to be dominated by the public sector, both in real estate, thanks to the wide-scale housing construction programmes implemented by the Government, and in banking services, which remain dominated by the six State-owned banks. Development of the stock market remains weak and slow. In August 2018, market capitalization remained below 45 billion dinars (about \$378 million) for a GDP of nearly 21 trillion dinars.

Where contributions to growth are concerned, over the entire period (1990–2016), domestic demand was a major driving force, thanks in particular to sustained public spending. Over the periods 1990–1999 and 2010–2016, growth was driven primarily by consumer demand and investment. Over the period 2000–2009, external demand, with significant growth in hydrocarbon exports, was the main driving force. During those years, exports were dominated by oil and gas.

Algeria has the highest export concentration index in the subregion and over the entire period.<sup>5</sup> In 1995, this index measured 0.52, compared to 0.16 for Morocco and 0.21 for Tunisia. Twenty years later (2016), that of Algeria remained stable (0.50), as did that of Morocco (0.17), while that of Tunisia improved considerably (0.13). The evolution of this index is supported by the evolution of the number of exported products. While Algeria is barely able to place more than 100 products on the international market, Morocco and Tunisia each export between 200

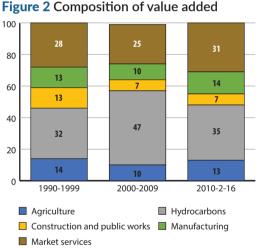
<sup>3</sup> Transport, communications, hotels, cafés, restaurants, shops, servicing of households and businesses.

<sup>4</sup> Real estate, banking and financial services.

<sup>5</sup> Herfindal index. The closer the index is to zero, the more diversified the exports. The closer the index is to 1, the more exports are concentrated on a smaller number of products.

and 230 products. Added to which, analysis of the nature and content of exports shows that Algerian products are essentially hydrocarbons and hydrocarbon derivatives. Where Morocco and Tunisia are concerned, almost all their export products come from the manufacturing industry and agriculture. As a result, Algeria will export fewer products in 2016 (93) than two decades before (99 in 1995). There is therefore considerable room for improvement. To this end, in October 2017 the Ministry of Commerce launched a national consultative process on the development of the country's national export strategy excluding hydrocarbons.

On the other hand, trade has been concentrated on a few countries. Where suppliers are concerned, five countries share the market for Algerian imports. These five countries accounted for 58 per cent of imports in 2000. In 2016, this share contracted to 52 per cent. France, which was in first place in 2000 (with 16.5 per cent), was overtaken by China in 2013. China absorbed 18 per cent of the country's total imports in 2016. Where customers are concerned, exports are more concentrated. The top five customers of Algerian products accounted for 67 per cent of its exports in 2000. This share declined to 60 per cent in 2016. Italy remains the leading customer of Algerian goods, taking 17.5 per cent of its exports in 2016.



Source: Algeria National Statistical Office, 2015, 2016, 2018.

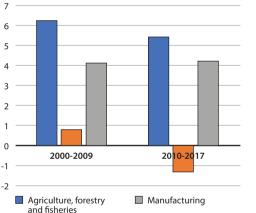
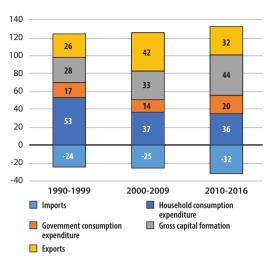


Figure 3 Sectoral growth (per cent, average)

Source: World Bank, 2017; World Development Indicators.

Hydrocarbons

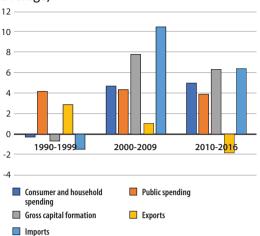
Figure 4 Composition of GDP (per cent)



**Source:** United Nations Conference on Trade and Development.

#### Figure 5 Expenditure growth (per cent,

average)

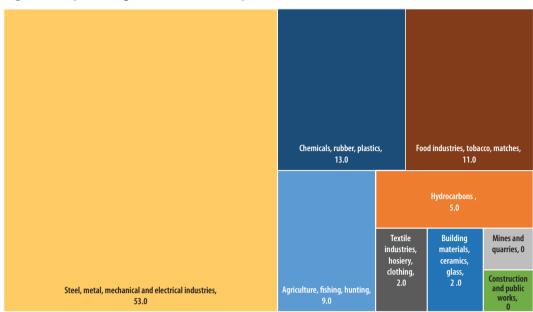


**Source:** United Nations Conference on Trade and Development, 2018, statistics.

#### Figure 6 Merchandise exports (2010-2016, per cent)



Source: Algeria National Statistical Office, 2012 and 2017.



#### Figure 7 Imports of goods (2010–2016, per cent)

Source: Algeria National Statistical Office, 2012 and 2017.

#### Fellaha 2019 action plan

This action plan was initiated in 2016 by the Ministry of Agriculture and Rural Development. It is aimed at better productivity and food security. Three pillars support this action plan: agriculture and livestock, forests and watersheds, and fisheries and aquaculture. Where the first pillar is concerned, it is important to maintain the efforts undertaken in the five-year programme 2010–2014 for the integration of sectors and the upgrading of farms. With forests and watersheds, the aim is to set up a forestry economy organized around the development of forest resources, the effective use of forest products and the promotion of ecotourism. Lastly, where the third pillar, fisheries and aquaculture, is concerned, the aim is to protect fishery resources with a view to boosting production that can generate export surpluses. By 2020, the following objectives are to be achieved:

- 5 per cent growth;
- Production valued at 4,300 billion dinars (at present-day value);\*
- An afforestation rate of 13 per cent;
- A reduction in imports of more than \$2 billion;
- Exports of more than \$1 billion (\$1.1 billion);
- Approximately 1.5 million jobs created.

This action plan includes quantified targets for the physical production of certain crops. The growth target seems realistic. In 2017, value-added production reached 2,320 billion dinars, halfway to the target.\*\* The external trade objectives (imports and exports) are likely to be the most difficult to achieve.

- \* Some \$36 billion (at present-day values).
- \*\* Some \$19.5 billion (at present-day values).

#### 3.2 Links

Non-hydrocarbon exports barely total \$1.5 billion. These include minimally processed manufactured products, but their share is very limited, no more than \$6 million in 2016. Semi-finished products are the only product group with export revenues in excess of \$100 million per year. These are primarily derivatives of the oil and petrochemical industry, including solvents, urea and ammonia. This reflects a very low level of integration in global value chains; in turn, this significantly affects the position occupied by Algeria on the Economic Complexity Index. This index measures the degree of sophistication of an economy and its exports. Algeria ranks 89th out of 127 countries, Morocco 82nd, while Tunisia ranked 45th.

The Algerian economy therefore has considerable potential. There are some initiatives, which are still tentative, but which may be conducive to export diversification. Export transactions of agricultural and light industrial equipment to African countries were recorded during 2018. Agricultural products were also exported. According to the National Association of Algerian Exporters (ANEXAL), exports of fresh fruit and vegetables could amount to between \$75 million and \$80 million by the end of 2018, compared to \$57 million in 2017. In 2017, the bulk of those exports consisted of dates and totalled some \$51 million. On the basis of foreign trade statistics for the first ten months of 2018, exports of agricultural products (fruit and vegetables) amounted to \$54.5 million, almost all of which was constituted by dates (\$51.7 million).

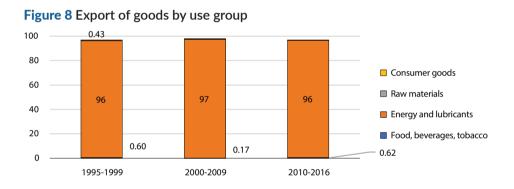
One third of all Algerian imports consist of industrial equipment and one fifth of semi-finished products. More than half of all imports are manufactured products. Over the course of 20 years, imports from the food, beverages and tobacco group have dropped by almost 10 percentage points, while those from the industrial equipment and semi-finished products group have grown accordingly. This is the result of the development over the same period of an agrifood supply chain in the private sector. The share of the private sector in agricultural value added grew from 48 per cent in 1990 to 83 per cent in 2016. In that way, the sector has been able to increase its contribution to non-hydrocarbon exports by a factor of 3.5. In 2000, exports from the agrifood sector constituted only 5 per cent of total exports excluding hydrocarbons. In 2016, that share increased to 18 per cent. These exports consist mainly of minimally processed products, including dates and beverages.

This situation is clearly apparent from the product space figure for Algeria. The coloured circles are products for which Algeria has a demonstrated comparative advantage greater than 1 and the grey circles are those for which the country has no demonstrated comparative advantage. The amount of this advantage is reflected by the size of the circle.<sup>6</sup> Where Algeria is concerned, the colour grey dominates, except for a few coloured circles. These circles represent oil, crude gas and their by-products. These brown circles represent the potential of Algeria in the oil and gas sectors. Their off-centre position in the graph reflects their limited

<sup>6</sup> Accordingly, the more colourful the graph, the more diversified the economy which it represents.

integration into local industry. The same applies to other products such as ammonia, fertilizers and certain agricultural products, especially dates.

Algeria does not appear in the central area of the graph. This area, which relates to hightech products, reflects integration and upward movement in the global value chain. On the other hand, a comparison of the situation displayed by the product space for 1995 with that in 2016 shows a loss of demonstrated comparative advantages relating to certain products such as pig iron (7201-HS4), hydrogen and rare gases (2804-HS4), blankets (6301-HS4) and men's and boys' short and long-sleeved shirts (6205-HS4). Where the last two products are concerned, competition from Chinese products has severely discouraged any local industry. In the iron and steel industry, paradoxically, privatization of the largest public company in castiron and steel working, SIDER, created through the restructuring in 2001 of the national steel company, to the benefit of one of the world leaders in this sector, ArcelorMittal, produced contrasting results. This prompted the government to re-nationalize the company in 2015.



Source: Algeria National Statistical Office, 2012 and 2016.

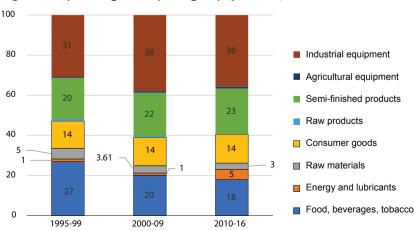
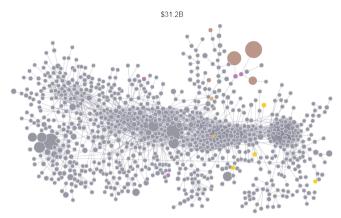


Figure 9 Export of goods by use group (per cent)

Source: Algeria National Statistical Office, 2012 and 2016.

#### Figure 10 Product space (exports, 2016)



Source: http://atlas.cid.harvard.edu.

#### 3.3 Technology

Until the early 2000s, foreign direct investment remained below \$600 million. With the opening up of the mobile phone sector, foreign direct investment increased sharply, exceeding \$1 billion for the first time. The sporadic nature of inward flows of foreign direct investment reflects the volatility of the country's international attractiveness. The hydrocarbons sector remains the most attractive sector for such investment in Algeria, accounting for nearly 80 of all inward foreign direct investment.

In the Maghreb region, Algeria is the country that attracts the least foreign direct investment. Over the period 2010–2017, more than half of all foreign direct investment went to Morocco (52 per cent), followed by Algeria (26 per cent) and Tunisia (22 per cent). The strong position enjoyed by Tunisia in the early 1990s in the tourism sector has since weakened.

As a result of the policy implemented by the Government over the past 10 years, the health and drug production sector has attracted increasing flows of foreign direct investment. The position occupied by the buildings, public works and waterworks sector depends on the major structuring projects in progress (motorways, dams, ports, etc.). Because of the increasing scarcity of budget-based funding, this share is likely to decline in the future. It could be maintained through public-private partnership financing, which is the subject of a bill currently under consideration.

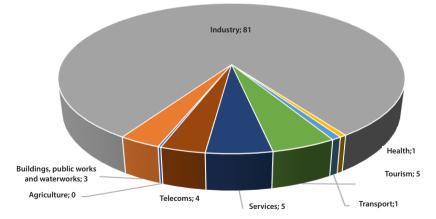
In the early 2000s, the mobile telecommunications sector was the only sector that attracted considerable flows of foreign direct investment, comparable to those of the hydrocarbons sector. After the granting of two licences (to Djezzy and Oredoo), this sector is now registering outflows instead, as part of the repatriation of dividends. The agricultural sector could take its leading place, thanks to investments by the United States of America in early 2018 in the

southwest and central regions of the country, where large cattle ranches and plantations of modern cereal and forage crops have been established.

The diversification of inward flows of foreign direct investment, like domestic private investment, is hampered by an unfavourable business environment and a volatile regulatory framework. This affects the structure of exports in terms of their level of technological complexity. Manufactured goods are only present in negligible quantities in the structure of Algerian exports. Algeria has the lowest share of medium and high-tech products in the subregion.

It is to be hoped, however, that the situation will improve in years to come, as the Government, prompted by a seemingly persistent fiscal crisis, is being made aware of the need to accelerate diversification of the economy. Thus, from 2015 onwards, private Algerian companies have started to export high value-added electronic products. In 2016, an export contract for electronic products (white goods and mobile phones) worth \$50 million was signed with Portugal and Spain. In 2018, a similar contract was signed with Italy. The amounts involved could rise from \$2.5 million to \$10 million in 2019. Although the values are relatively low, they augur well for a new dynamic for the country.

Because Algeria has the bulk of the heavy and oil industries in the region, its carbon (CO2) emissions index is higher than that of Morocco and Tunisia. Considerable efforts have been made over the last few decades, however, and the index level has been halved, dropping from 0.44 in 1990 to 0.23 in 2014.7 Part of this reduction is attributable to a decline in growth and part to efforts to develop less energy-intensive industries.



#### Figure 11 Foreign direct investment by sector (per cent, 2016)

*Source:* National Investment Development Agency: www.andi.dz/index.php/en/declaration-investment-declaration/balance-sheet-of-declarations-d-investment-2002-2018.

<sup>7</sup> Date of latest update.

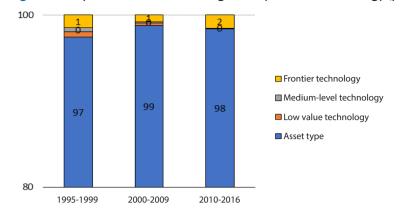
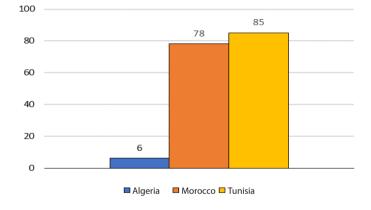
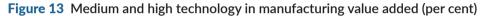


Figure 12 Exports of manufactured goods by level of technology (per cent)

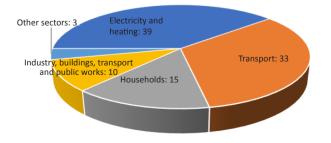
Source: United Nations Conference on Trade and Development, https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx.



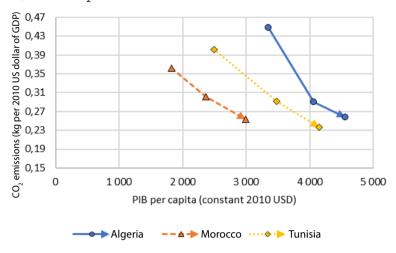


Source: United Nations Conference on Tradeand Development, https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx.

#### Figure 14 CO<sub>2</sub> emissions by source (2010–2014, per cent)



Source: World Development Indicators.



#### Figure 15 CO<sub>2</sub> emissions and GDP per capita

#### 3.4 Summary

The rentier nature of the Algerian economy acts as a brake on the process of structural transformation. The second oil shock of 1986 prevented the establishment of manufacturing industries that could take over from the oil industry. Existing light and traditional industries suffered from the structural adjustment programme of the 1990s. Added to which, competitive imports initially from China and subsequently from Turkey raised the opportunity cost of reviving traditional industries in the handicrafts, leather and textile sectors. This was reflected in the configuration of the product space of Algeria, which saw the country's potential decline between 1995 and 2016. Over the course of twenty years, the four products (pig iron, hydrogen and rare gases, blankets and men's and boys' shirts) in which Algeria had enjoyed comparative advantages were wiped out, despite policies to revive industry and measures taken to stimulate non-hydrocarbon exports. Today, the Algerian development model is being challenged by the State's shrinking capacity to support growth through large-scale public investment. Algeria is now constrained to rely on the development of the private sector to free its economy from its dependence on the hydrocarbons sector.

Source: World Development Indicators.

## **Employment**

#### 4.1 Labour productivity

The manner in which employment has evolved in the various sectors, over a long period, reflects some level of tertiarization of the Algerian economy to the detriment of agriculture and the manufacturing industry. The share of services in total employment rose from 50 per cent in 1990 to nearly 58.9 per cent in 2018. It should be noted, however, that this figure includes central and local government staff, who account for between 65 and 75 per cent of the total number of services. The trade sub-sector, which consists primarily of retail and wholesale trade, accounts for 15 per cent. Market services account for 26 per cent of total services in 2018,<sup>8</sup> which is double its share in 2010 (13 per cent). It is this category of services that most closely corresponds to the process understood as tertiarization of the economy.

The share of the construction sector initially declined from 14 to 10 per cent between 1990 and 2001, then rose to 17 per cent in 2018, driven in particular by public investment. This increase is due in particular to the programme to build 5 million housing units and to major programmes in the fields of public works and waterworks, including the construction of the East-West motorway, more than 1,200 km long, and the construction of several dams and viaducts.

The share of services in total employment rose from 50 per cent in 1990 to nearly 58.9 per cent in 2018. This figure includes hydrocarbons, whose weight in employment is low (2 per cent), and dropped even further in 2018, to 1 per cent. The jobs lost in the mid-1990s in the manufacturing industry, in particular in the public sector, as a result of the structural adjustment programme have been recouped, in part, in administration and agriculture. An unemployment benefit fund was set up in 1994 to cushion the impact on employment.

The gender distribution of employment shows a higher share of women in the health sector (43 per cent) and manufacturing industries (21 per cent) than in the public administration sector (12 per cent).<sup>9</sup> In education, women are in the majority. Wage regulations in the

<sup>8</sup> These are essentially financial services, real estate transactions and business services.

<sup>9</sup> National Statistical Office, 2018. "Activité, emploi et chômage en septembre 2018" ("Activity, employment and unemployment in September 2018"), *Données statistiques* No. 840, January 2019.

Algerian civil service make no distinction by gender, thereby minimizing gender inequalities in civil service wages. There are no data for the private sector.

Between 1991 and 2016, growth in apparent labour productivity rose to an average of 5 per cent for agriculture, 3 per cent for services and 2 per cent for industry. These averages conceal different trends in the three sectors. Productivity in the industrial sector was highest during the period 1991–2013, amounting to \$30,000, compared to \$10,000 in services and about \$6,300 in agriculture.<sup>10</sup> The industrial sector includes hydrocarbon operations, which are very capital intensive. The decline in the level of productivity in industry is largely due to the decline in the hydrocarbon sector, which saw its nominal production drop by half from 2014 onwards.

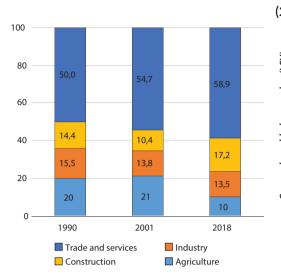
Services benefit from high levels of income generated in the finance sector (mainly banking institutions) and the less labour-intensive real estate sector.

Agriculture caught up with services in 2013 (\$13,500), however, and services caught up with the productivity level of industry in 2014 (\$18,500). The growth in productivity in the agricultural sector is therefore worthy of note. It is testimony to the effective efforts made in this sector over more than two decades. The measures taken by the Government in this respect are reviewed in chapter 1, under the Fellaha 2019 action plan. Long before this plan, development plans had been carried out for the agricultural sector, with the aim of upgrading the skills of the workforce through improved training. These skills upgrading measures were carried out in consultation with the vocational training sector. Agricultural extension activities have also been carried out by the technical agricultural colleges to support farmers and provide them with guidance on the best use of fertilizers, new sowing and planting techniques, and to inculcate respect for grazing land and irrigation.

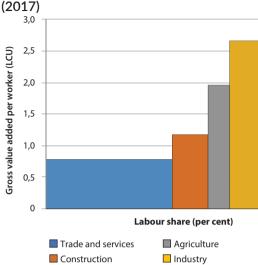
The trends in labour productivity over the periods 2001–2011 and 2011–2017 show that intra-industry productivity has remained well above intersectoral productivity. This indicates how little structural transformation has taken place in the Algerian economy.

<sup>10</sup> In United States dollars at 2010 constant values.

Figure 16 Employment by sector (per cent)



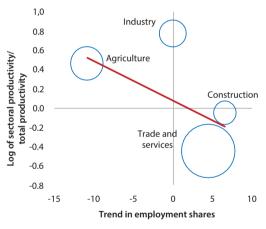
## Figure 17 Labour share and productivity



Source: Algeria National Statistical Office, 1990, 2001, 2018.

**Source:** Calculations based on economic accounts value added data from the National Statistical Office and the surveys on employment and unemployment for the years 2001, 2011 and 2017.

#### Figure 18 Employment mobility (2001–2017)



*Source:* Calculations based on economic accounts value added data from the National Statistical Office and the surveys on employment and unemployment for the years 2001, 2011 and 2017.

#### 4.2 Decent work

The various reforms undertaken in Algeria through the structural adjustment programme and the ensuing opening up of trade have had a significant impact on the structure of the labour market. Thus, the share of permanent employees, which stood at 47 per cent back in 1997, rose to 38 per cent in 2018, after falling to 33 per cent in 2010. The first reason is the contraction of economic activity in the 1990s. This was due to the security situation. The second reason, linked to the first, is the dissolution of several hundred State-owned enterprises, as part of the reform of State-owned enterprises initiated in the early 1990s. This reform process began with the legal and financial autonomy granted to public enterprises during the years 1991–1996. At the same time, a programme of financial consolidation had been carried out to recapitalize these enterprises. In 1997, this consolidation programme amounted to 110 billion dinars (about \$924 million in current dollar values), or 1.3 per cent of GDP. Over the same period, the food import offices, the national railway transport company and the national electricity and gas company received 187 billion dinars (approximately \$1.5 billion at current dollar values), or 6.8 per cent of GDP, to clean up their balance sheets. Despite these consolidation measures, in April 1996 the Algerian Government was forced to launch a first privatization programme for 1,300 public enterprises. In April 1998, 827 public enterprises were dissolved and 464 sold to their employees, resulting in the loss of 36,000 jobs.

As a result, the share of the "non-permanent employees and apprentices" category increased from 19 per cent in 1997 to 31 per cent 20 years later. This reflects the increase in precarious employment in the Algerian labour market. Employees in this category hold positions on fixed-term contracts, which are not necessarily renewable. It should be noted that, despite all the fiscal and parafiscal incentives and encouragement put forward by the Algerian Government to promote entrepreneurship and the creation and development of small and medium-sized enterprises, the share of employers and self-employed persons has remained stable over the past 20 years.

There are still very significant gender differences for these different categories. The share of permanent employees is much greater for women (51 per cent compared to 35 per cent for men), because women generally form the majority in the education and health sectors, where civil service contracts are of the open-ended, permanent contract type.<sup>11</sup> Women entrepreneurs, however, are in the minority (21 per cent compared to 30 per cent for men).

Unemployment in 2018 is estimated at 11.1 per cent, down slightly (0.6 percentage points) from 2017. It affects more women (19.5 per cent) than men (9 per cent).

Nearly half of the unemployed have no qualifications or training. For the other categories, the possession of a qualification is no guarantee of employment in a profession. Only one in four graduates from higher education or vocational training are able to find employment. It is taking longer and longer for people to get out of unemployment. Some 60 per cent of the unemployed have been without work for at least one year. More than 46 per cent of the unemployed report having worked in the past. Three quarters of this category of unemployed (75 per cent) worked as non-permanent employees and mainly in the private sector.

<sup>11</sup> By 2018, women accounted for 63 per cent of the education workforce.

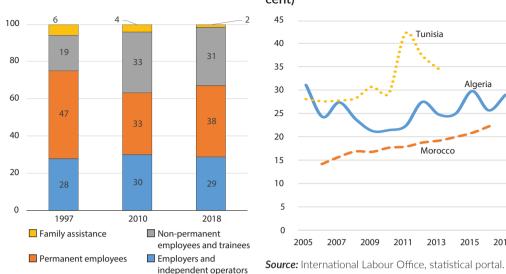
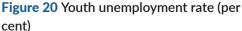


Figure 19 Employment status (per cent)



Algeria

2013

2015

2017

Source: National Statistical Office, employment and unemployment surveys, 2010 and 2018.

A characteristic feature of North Africa as a whole is that young people have more difficulty in finding employment. The unemployment rate of the youth population reached 28.2 per cent over the period 2015–2017, compared to 25.6 per cent between 2005 and 2009. In 2018, it was estimated at 26.4 per cent, having dropped slightly (1.9 per cent) from 2017.

The National Statistical Office estimates the share of the informal sector in total employment at around 40 per cent for the period 2001-2014.<sup>12</sup> The practice of informal employment affects men (41 per cent) more than women (24 per cent). Rural areas are worse affected (44 per cent) than urban areas (35 per cent), in particular because seasonal employment in agriculture includes a large share of undeclared jobs. Informal employment is more prevalent among the uneducated (26 per cent) than those with a university degree (7 per cent). In 2018, the National Statistical Office estimated the level of employment that was not declared to the social security services at around 42 per cent, combining all sectors of economic activity.<sup>13</sup>

### 4.3 Education and skills

The youth literacy rate is one of the highest in the region (94 per cent in 2017), slightly below that of Tunisia (96 per cent). It was already quite high in the early 1990s (estimated at 75 per cent) compared to those of neighbouring countries, and has continued to rise.

<sup>12</sup> Informality is estimated by the services of the National Statistical Office on the basis of the percentage of the employed population not affiliated with social security, excluding those working in the agricultural sector. National Statistical Office, "Enquête emploi auprès des ménages 2014" ("Household Employment Survey 2014"), Collections statistiques No. 198, Série S: Statistiques sociales, February 2016.

<sup>13</sup> National Statistical Office, Social "Activité, emploi et chômage en septembre 2018" ("Activity, employment and unemployment in September 2018"), Données statistiques No. 840, January 2019, page 13.

The average number of years of schooling is the highest in the region. For example, the population aged 25 has had nearly eight (7.8) years of schooling. In 1990, that average was 3.6 years. It has continued to grow with the requirement for the school-age population to attend school and complete primary education.<sup>14</sup> It should be noted that, on average, girls have one year less schooling (7.6 years) than boys (8.6), according to recent estimates (2017).

At the national level, girls are either on a par with boys (primary and middle school) or in higher numbers (secondary school). The discrepancy (one year less for girls) is due to girls dropping out of school in some rural and remote areas of the country.

Thanks to efforts made by the country to promote universal and free schooling, illiteracy fell by more than half between 1998 and 2017, declining from 31 per cent in 1988 to 12 per cent in 2017.<sup>15</sup> The general population and housing census conducted in 2008 estimated the illiteracy rate at 25 per cent. For females, the rate was higher, at 32 per cent versus 17 per cent for males.

An analysis of the spatial distribution of the illiteracy rate shows that the highest rates are found in the plains regions with nomadic populations whose activities are essentially concentrated on livestock, grazing and agriculture.

The school enrolment rate of young people (15–24 years) is very high in Algeria: close to 94 per cent. It is higher among girls (96 per cent) than boys (92 per cent). These high levels of enrolment in education and the low illiteracy rate enable Algeria to score well in terms of skill levels on the labour market, with 68 per cent at the average level, 17 per cent high and 15 per cent low.

This is a definite asset for Algeria in its endeavour to speed up the structural transformation of its economy. Efforts are still needed, however, to improve the quality of the education system. Measures need to be taken in the vocational training sector to recover those excluded from the education system, so that they can be brought into the labour market. Work on these measures in the future will enhance the employability of young graduates.

<sup>14</sup> In Algeria, it is forbidden for children to be excluded from school during the primary cycle.

<sup>15</sup> National Association to Curb Illiteracy (IQRAA).

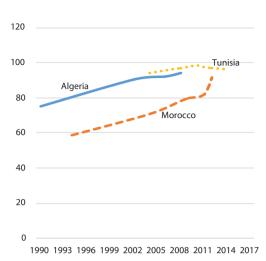
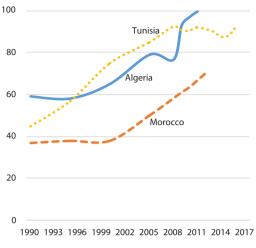
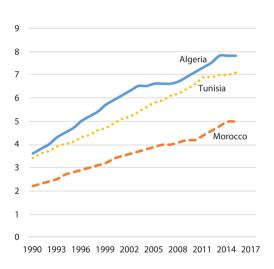


Figure 21 Youth literacy rate (per cent)

Figure 22 Gross enrolment ratio, secondary (per cent)



Source: UNESCO statistics portal: http://data.uis.unesco. Source: http://hdr.undp.org/en/indicators/103006#. org/index.aspx?



#### Figure 23 Average years of schooling (aged 25 and older)

100 8 17 22 80 60 68 40 20 16 0 Algeria Morocco Tunisia 📒 High Medium Low

#### Figure 24 Skill levels (2017, per cent)

Source: UNESCO statistics portal: http://data.uis.unesco. Source: http://hdr.undp.org/en/indicators/103006# org/index.aspx

#### Female employment rate: a potential to be developed

The employment rate of women in Algeria (15 per cent) is the lowest in the subregion (Morocco, 25 per cent and Tunisia, 24 per cent). Although their educational level is rising, an increasing proportion of the potential labour force is not being used. Women's educational attainment has caught up with that of men. They are more likely to complete secondary school and generally perform better in school than their male counterparts. However, nearly half of young women (aged 15–24) are neither attending school nor receiving training, and are even less likely to be offered employment. The improvement in educational attainment has not translated into a significant improvement in employment prospects for women, which are worse than those for men, and also worse than those of women in other countries.

Those in the labour force experience a much higher unemployment rate (20.7 per cent) than men (9.4 per cent), and the gender gap widens as educational attainment increases. The gender pay gap is negligible. In Algerian regulations, there is no gender-based discrimination in the definition of wage levels and remuneration. Nor is there any significant difference between men's and women's wages when they have the same levels of education. The positive pay gap is largely attributable to the selection effect of the women who enter the labour force: on average, working women have a higher level of education than men. More than 40 per cent of female workers are college graduates, compared to 10 per cent of male workers. Moreover, women tend to occupy better positions: they are more likely to have permanent contracts, to work in the public sector and to benefit from social security. At the official level, the Government had made a commitment in its 2018 action plan to strengthen the place of women in working life, in particular by encouraging their access to positions of responsibility in both the public and private sectors. It should be noted that this plan, beyond stating such intentions, does not specify practical modalities for the attainment of these objectives.

#### 4.4 Summary

Algeria has made significant efforts in the area of education. It is among the top 20 countries in the world in terms of the progress it made in access to education over the period 1980–2000. Thus, at 94 percent, its youth literacy rate is one of the highest in the subregion. Algeria leads the countries of the subregion in terms of the number of years of schooling among the population aged 25 and over, which measured 7.8 years in 2017, compared to an average of 3.6 years in 1990.

This has enabled Algeria to score well in terms of the skill level of its workforce. It is estimated that the skill of 68 per cent of workers is medium level, of 17 per cent high and of 15 per cent low. Education is not, however, a factor that automatically opens the doors to employment. Only one in four graduates from higher education or vocational training establishments are able to find jobs. While, in 2018, the overall unemployment rate was 11.7 per cent, for young graduates the unemployment rate was 28 per cent. Women are more affected by unemployment than men, with a rate of 19.4 per cent compared to 9.9 per cent for men. Women's participation in the labour market is the lowest in the subregion, with an employment rate for women aged 25 and over of 13.4 per cent in 2017.

In terms of employment, the Algerian economy has become tertiarized without passing through a phase of industrialization. The share of services in total employment rose from 50 per cent in 1990 to nearly 60 per cent in 2018. The industrial sector includes hydrocarbon operations, which are very capital-intensive.

Lastly, employment is of a somewhat precarious nature in Algeria. While, in 1997, 47 per cent of the workforce held permanent positions in, this proportion dropped to 38 per cent in 2018. The informal sector also plays an important role, accounting for an estimated 35–40 per cent of total employment.

## Society

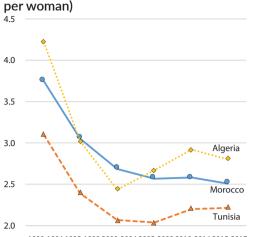
## **5.1 Demographics**

As of 1 January 2018, the population of Algeria numbered 42.2 million, up from 25.3 million in 1990. Algeria began its demographic transition in the mid-1980s, mainly as a result of the raising of the marriageable age and the increase in contraceptive use (figure 27). The average age of marriage for women has risen from 23.7 years in the 1970s to over 30 years in the 2010s. Where contraceptive use is concerned, its prevalence has increased considerably, rising from 35 per cent in the mid-1980s to over 80 per cent in the early 2000s. To this must be added women's improved access to education, with the enrolment rate for girls rising from 41.1 per cent in the early 1970s to over 83 per cent in the early 2000s.

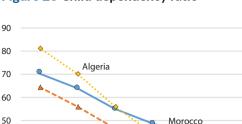
It appears, however, that the demographic transition came to a halt in the early 2000s. While the fertility rate had dropped from 4.5 in 1990 to 2.5 in 2002, it grew again until 2013, reaching 2.9 children per woman. Over the course of a mere 10 years, between 2008 and 2018, with this high birth rate, the Algerian population grew by 7.63 million. In 2017, for the fourth consecutive year, the number of live births exceeded 1 million, totalling 1,060,000 births, up from 580,000 in the early 2000s. Projections by the National Statistics Office indicate that the Algerian population is expected to reach 57.8 million in 2040.

As in other countries of the subregion, the dependency ratio fell sharply between 1990 and 2015, from 81.3 to 43.8 per cent. between 2010 and 2015, however, there was an increase in this ratio, with a value of 40.4 per cent. This is due to a significant increase in the birth rate, while the increase in the working population has been relatively slow. Thus, as the country struggles to create enough jobs, the accelerating growth of its population will pose major challenges in terms of economic and social needs.

Demographic pressure places a particular strain on housing. Thanks to very favourable economic conditions during the period 2000–2015, Algeria has been able to meet its housing needs with very ambitious housing construction programmes. Oil export earnings have enabled the country to pursue a proactive housing policy. The Ministry of Housing, established in 1977, had set a target of building 100,000 housing units a year. While there are no recent statistics on the living conditions of Algerians in cities, in 1990, the proportion



#### Figure 25 Fertility rate (number of children



Tunisia

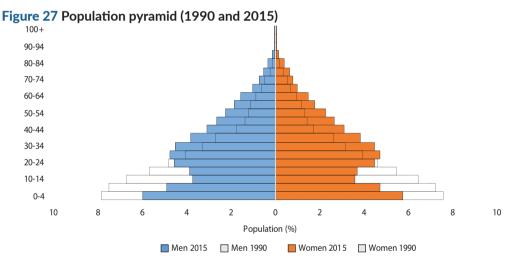
#### Figure 26 Child dependency ratio

1990-1994 1995-1999 2000-2004 2005-2009 2010-2014 2015-2017

*Source:* United Nations Department of Economic and Social Affairs, 2017.



1990-1994 1995-1999 2000-2004 2005-2009 2010-2014 2015-2017



40

30

20

10

0

of the urban population living in substandard housing was only 11.8 per cent, compared with 37.4 per cent in Morocco, for example.

Social housing has always been a priority for the public authorities. Between 2010 and 2015, public investment in housing (construction and maintenance) increased, rising to nearly \$24 billion, or about 2.2 per cent of GDP. The Government set in place a range housing construction programmes with public subsidies. Between 1999 and 2003, the number of housing units built with State support rose to nearly 490,000 and, between 2010 and 2014, this number rose further, to 1.1 million.

Source: United Nations Department of Economic and Social Affairs, 2017.

#### Social housing policy in Algeria

Algeria has made a considerable effort to eradicate shantytowns: between 1962, the year of independence, and 2008, the housing stock increased by a factor of 3.5.

Starting in 2000, the State has been actively implementing a housing construction policy. The assistance it has put in place for this purpose can be divided into 5 categories:

- Land price subsidies;
- Land development subsidies;
- Direct subsidies for the construction of social rental housing;
- Rent-to-buy subsidies: beneficiaries pay 75 per cent of the price of the property over a period of 20 years without interest;
- Reduction in value added tax (VAT) for the construction of public housing.

There are five forms of housing production: (a) Public rental housing, financed from the State budget, intended for the least well-off households (income less than 1.5 times the minimum wage); (b) Rent-to-buy housing, for households whose income is between 1.5 and 6 times the minimum wage, under the management of the Housing Improvement and Development Agency (AADL); (c) Public promotional housing, for households with higher incomes; (d) So-called "assisted" housing, intended for the same category of households as rent-to-buy houses in urban areas; (e) Housing in rural areas, intended to curb the rural exodus. Between 2000 and 2010, an average of 170,000 housing units were built each year. Through the conduct of successive five-year plans, it has been possible, over the period 2005–2012, to make available 2,298,499 housing units, including 1,402,787 urban and 895,712 rural units. The 2010–2014 five-year plan has provided for the construction of 2 million housing units, with 1.2 million units to be delivered by the end of 2014, and 800,000 between 2015 and 2017.

### 5.2 Health

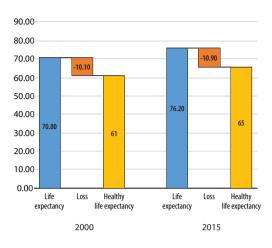
Life expectancy in Algeria has risen significantly, mainly as a result of improvements in health conditions and living standards. Over the course of 15 years, from 2000 to 2015, Algerians gained 5.4 years of life expectancy, the same as Moroccans, but twice as much as Tunisians and Egyptians. Life expectancy in Africa has risen from 50.8 to 60.7 years.

Healthy life expectancy has increased by four years, from 61 to 65 years. In Morocco, healthy life expectancy increased from 58.8 to 65.3 years, in Tunisia from 63.2 to 66.3 years, and in Egypt from 59.1 to 60.8 years. In Africa, healthy life expectancy increased by the same amount as life expectancy, from 44.4 to 53.3 years.

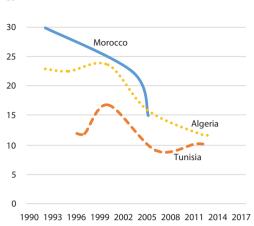
Lastly, there has been a significant decrease in the stunted growth of children, indicating a decline in child malnutrition.

The Algerian health system has improved considerably. In the early years of the country's independence, between 1962 and 1972, life expectancy was only 50 years, infant mortality was 180 per 1,000 live births, and communicable diseases were widespread. The young Algerian State then took steps to reverse that trend. These steps included increasing the number of medical staff, combating contagious diseases, launching a malaria eradication programme and introducing compulsory child vaccinations. In 1974 the Government introduced free health care and set up a health system in the 1970s. Thanks to all these efforts, the country embarked on an epidemiological transition between 1982 and 1992, which led to a significant

Figure 28 Healthy life expectancy (years)



# Figure 29 Prevalence of stunting in children (per cent)



reduction in the incidence of contagious diseases. After the decade of violence, between 2002 and 2012, the Government developed and implemented a hospital reform programme, to improve the planning of care, modernize hospitals, and provide greater access to care in public hospitals. A new health law was promulgated in 2018 to counter trends in the country's epidemiological situation, including the emergence of chronic diseases, and to remedy major deficiencies in the national health system, the effectiveness of which had been judged by both users and health professionals to be barely adequate. There had been a significant increase in non-communicable diseases between 2000 and 2015 (figure 30). In 2015, cardiovascular diseases accounted for 48.04 per cent of deaths from non-communicable diseases and diabetes for 5.8 per cent of such deaths.

According to the Ministry of Health, the current reform is aimed at strengthening the public health service by making it more accessible and more efficient and by taking fuller advantage of the capacities of the private sector and the health-care services that it can deliver so that citizens can be cared for in the best conditions.

Source: World Health Organization, 2017.

**Source:** International Classification of Functioning, Disability and Health, 2017.

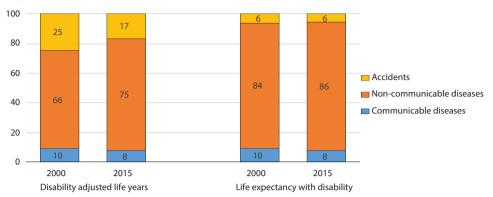


Figure 30 Disease burden by cause (15-49 years, per cent)

Source: Institute for Health Metrics and Evaluation, 2017.

### 5.3 Poverty and inequality

The most recent data on the incomes of Algerians date back to the 2011 household consumption survey.<sup>16</sup> In view of the economic conditions that prevailed after that date, brought about by high oil prices, and given the country's generous social transfer policy, poverty rate data may be extrapolated to more recent periods without great risk of error.

The 2011 survey reveals that the extreme poverty rate, defined as the fraction of the population living on less than \$1.90 per day, is 0.5 per cent, compared to 2 per cent in Tunisia and 3.1 per cent in Morocco in 2010 (Figure 31). The moderate poverty rate, measured as the proportion of the population living on an income of between \$1.90 and \$3.20 per day, was 0.8 per cent, compared to 8.4 per cent in Tunisia and 15.4 per cent in Morocco in 2010.

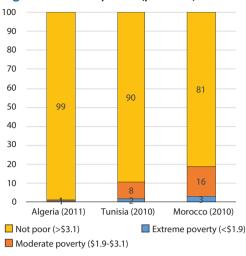
As indicated, this low level of poverty is due to the rise in GDP per capita from \$3,550 in 1990 to \$4,463 in 2010, and to a very proactive social policy based on a system of direct and indirect transfers, which accounted for 8.96 per cent of GDP in 1990 and 10.89 per cent in 2010. In 2017, they amounted to 9 per cent of GDP and 23 per cent of the State budget.

Income inequalities have thus been considerably reduced in Algeria, with the Gini index falling from 35.3 in 1995 to 27.6 in 2011. This is much lower than the rate prevailing in Tunisia in 2010, which was 35.8.

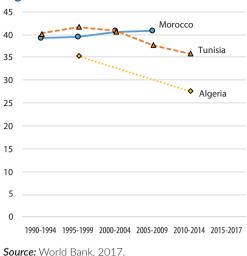
Gender inequalities persist, however, including in the participation of women in the labour market. While this rate was 73 per cent for men in 2017, it was only 16.7 per cent for women. Where literacy is concerned, thanks to a significant increase in girls' access to education, inequalities have been reduced. The ratio of female to male literacy rates for 15–24-year olds thus increased from 0.92 in 2002 to 0.96 in 2008. Inequalities in access to secondary education have also been significantly reduced. The gross secondary school enrolment rate

<sup>16</sup> In United States dollars at 2010 constant values.

Figure 31 Poverty ratio (per cent)



#### Figure 32 Gini index



Source: World Bank, 2017.

#### 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0.0 2015 2016 990 2000 2002 2003 2004 2007 2008 2010 766 666 2001 2005 2006 2005 2014 .66 66 66 999 966 99 999 201 201 201 Labour force participation rate Employees Youth literacy ---- Gross enrolment rate ······ Healthy life expectancy

### Figure 33 Gender parity indices

Source: International Labour Office, 2017; World Bank, 2017; United Nations Development Programme, 2017.

was 65.5 per cent for boys and 51.5 per cent for girls in 1990. In 2011, it was 97.8 per cent for boys and 102 per cent for girls. Lastly, there are no gender inequalities in life expectancy. Healthy life expectancy in 2015 was 65.4 years for women and 65.2 years for men.

### 5.4 Summary

With improved living standards, better access to education for women, and a proactive policy to reduce the birth rate, Algeria embarked upon demographic transition in the 1980s. In the 2000s, however, the country underwent a reverse transition, with a significant rise in the birth rate, recording more than 1 million births per year between 2014 and 2017. Projections suggest that the population could reach 53 million by 2030. The country's resources have thus far enabled it to meet the social challenges associated with significant population growth.

With the decline in oil revenues, however, and the problems faced by Algeria, together with its neighbours, to created sufficient employment, far-reaching economic reforms will be needed to maintain its social achievements. Moreover, the Algerian social model, based on social transfers and subsidies, is budget-driven, and it is also in urgent need of reform. The reform of the subsidies system is currently being prepared by the Government and should eventually make it possible to ensure the optimal allocation of public funds to the most vulnerable populations through a system of targeted aid.

## Key messages

- The dependence of economic growth on the hydrocarbon sector has not lessened over a long period of time. The rise in oil prices in the 2000s enabled the country to bridge its gaps in infrastructure and meet important social needs (in particular housing), but private investment remained low, accounting for only 10 per cent of total investment. Diversification of the economy and its exports, to reduce its dependence on the hydrocarbon sector, remains a major challenge for the country, as it faces a lasting drop not only in the price of oil, but also in its production.
- Exports are over-concentrated on hydrocarbons, which for a very long time have accounted for 95 per cent of exports. Non-hydrocarbon exports and their derivatives amount to no more than \$1 billion, comprising a very small number of products (100 compared to more than 200 in neighbouring countries). Moreover, the Algerian economy is not well integrated into the African market. Diversification of exports goes hand in hand with diversification of the economy, but the country could already increase its exports, including in the agricultural sector.
- The country began its demographic transition in the 1980s, but the number of births has increased significantly in recent years, with more than 1 million children born each year between 2014 and 2017. Population growth, at a time when the country's development model is losing impetus, poses many challenges, both in terms of job creation and social issues. The gains in human development, reflected by a dramatic improvement in the human development index, could therefore be compromised, since these gains have been driven by public spending based on declining oil revenues.
- Job creation, especially for young people and women, remains a priority for the country. The rate of women's participation in the labour market is one of the lowest in North Africa, and youth unemployment, especially among graduates, is at a high level and not improving. Development of the private sector is needed more critically than ever before, to create the necessary number of jobs and jobs of the necessary quality to ensure optimal use of the human capital offered by the Algerian population. The country

has made considerable efforts to improve access to education, placing at its disposal a relatively well-trained workforce.

## References

Economic Commission for Africa (2017). *Economic Report on Africa 2017: Urbanization and Industrialization for Africa's Transformation*. Addis Ababa.

Institute for Health Metrics and Evaluation, 2017, Global Health Data Exchange. Available at http://ghdx.healthdata.org/gbd-results-tool.

International Labour Office (2017). ILOSTAT database.

International Monetary Fund (2017). Available at www.imf.org/.

Massachusetts Institute of Technology (2017). The Observatory of Economic Complexity (database).

National Statistical Office (2012), "Évolution des échanges extérieurs de marchandises de 2001 à 2011" ("Trends in foreign trade in goods from 2001 to 2011"), *Collections statistiques No.* 176/2012, Série E: Statistiques économiques No. 72.

\_\_\_\_\_ (2015), "Les comptes économiques en volume de 2000 à 2014" ("Economic accounts by volume from 2000 to 2014"), *Données statistiques* No. 710.

\_\_\_\_\_ (2016), ONS (2016), "Rétrospectives des comptes économiques de 1963 à 2014" ("Backcasting of economic accounts from 1963 to 2014), *Collections statistiques No. 197/2016, Série E: Statistiques économiques* No. 85, January.

("Trends in foreign trade in goods from 2011 to 2016"), *Collections statistiques No. 205/2017*, *Série E: Statistiques économiques* No. 92.

\_\_\_\_\_ (2018), "Les comptes économiques en volume de 2015 à 2017" ("Economic accounts by volume from 2015 to 2017"), *Données statistiques* No. 710.

Organization for Economic Cooperation and Development (2017). Database. Available at https://data.oecd.org/.

United Nations Conference on Trade and Development (2017). UNCTADstat database.

United Nations Department of Economic and Social Affairs (2017). Available at https://esa. un.org/unpd/wpp/. United Nations Development Programme (2017). *Human Development Report*. Available at http://hdr.undp.org/en/data.

United Nations Educational, Scientific and Cultural Organization (2017). Institute for Statistics. Available at http://data.uis.unesco.org/Index.aspx.

United Nations Human Settlements Programme (2017). United Nations Human Settlements Programme (UN-Habitat) database. Available at http://urbandata.unhabitat.org/explore-data/.

United Nations Industrial Development Organization, 2017. United Nations Industrial Development Organization database. Available at https://stat.unido.org/.

World Bank, 2017. Database. Available at https://data.worldbank.org.

World Health Organization, 2017. Global Health Observatory data repository. Available at http://apps.who.int/gho/data/node.home#.

## **UNECA.ORG**

Printed in Addis Ababa, Ethiopia by the ECA Printing and Publishing Unit. ISO 14001:2015 certified. Printed on chlorine free paper.

••

• 

•••

•