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SURVEY OF ECONOMIC AND SOCIAL
CONDITIONS IN NORTH AFRICA

2000

Survey of Economic and Social Conditions in North Africa 2000

INTRODUCTION

The present Survey of the Economic and Social Conditions in North Africa, 2000 has taken some departure from the previous reports of the same title. This departure has, mainly, been inspired by the fact that as the world entered the new Century there were many changes in the structure of the world economy that had either been fully completed or were in the processes of becoming a new and irreversible reality. It was thus felt useful, in the report for the year 2000, to have greater focus on the structural analysis of the North African economies as opposed to merely reviewing the developments of the preceding short-term period.

Thus, unlike the previous Survey of the Economic and Social Conditions in North Africa that have, hitherto, been prepared and issued by the Sub-regional Centre for North Africa (SRDC-NA), the present report attempts to sketch a picture of where, from a structural point of view, the North African economies were as the world entered the 21st Century. Such analysis is believed useful for at least two main reasons. Firstly the countries in the sub-region can start to reflect on the challenges they face given, on the one hand, their respective internal socio-economic structure as it has evolved and as it is presently and, on the other hand, taking into account the major changes that have taken place in the global economic relationships and structures.

A second reason for the usefulness of a structural analysis at the present juncture is the facilitation of better situating the economic and social situation in the North African countries in the more global analyses that have been made by a number of international institutions. The three important examples of such structural studies given below will amply illustrate the importance at this particular time with the beginning of a new Century to attempt a structural approach, at the sub-regional level, so as to filter out -even if only tentatively- the structural trends and conditions that underlay the economies of the North African sub-region at the turn of the present 21st Century. The three examples include :

- Entering the 21st Century, World Development Report 1999/2000. By the World Bank;*
- ✓ *Can Africa Claim the 21st Century? By the World Bank;*
- Initial Conditions For Africa's Development in the 21st Century, Economic Report on Africa, 2000. By the Economic Commission for Africa (ECA).*

It is also hoped the present preliminary structural overview of the North African economies will serve as a useful initial basis for the sub-regional long-term studies that are envisaged.

It should be emphasised that, in making the departure from the traditional analysis in the Report on the Economic and Social Conditions in North Africa from only analysing the recent developments in the sub-region in the preceding year, the SRDC-NA has not ignored the spirit and letter of the various recommendations of the 15th meeting of the Intergovernmental Committee of Experts that met in Tangier (Morocco), 28-31 March 2000 on the Report on the Economic and social Conditions in North Africa, 1998-1999 that was presented to that meeting.

As will be noted in the present report, the following concerns of the committee have been taken into account:

- The need to have the issue as a cross-cutting element of the analysis;*
- The urgency of adequately analysing the water issue in the sub-region;*
- The need to situate the analysis in a more global context;*
- The treatment of international trade including sub-regional trade;*
- The question of the environment.*

Finally, it is hoped that such a structural overview of the economies in the North African sub-region can be undertaken every five years so as to give landmarks in the evolution of the economies of the sub-region.

SECTION I

NORTH AFRICAN ECONOMIES AND THE OVERALL WORLD ECONOMIC CONTEXT

1.1 Structural Shifts in the World Economic Environment

Shifts in Economic Thought

The world economy entered the new Century with significant shifts in development thinking, in the patterns of production and trade and in the financial architecture underpinning the generation of wealth among nations and corporations. The World Bank in its *World Development Report 1999/2000* has given a panoramic analysis of the most important changes in the world economy as well as the forces behind them. One crucial issue, however, is still unclear and needs, on its own, a separate and equally profound analysis by the international community as a whole and the developing countries in particular. This issue relates to the extent to which developing countries will be able to successfully reposition their underdeveloped economies to face the inevitable challenges while exploiting the new opportunities that are simultaneously inherent in the changing world economy of the 21st Century.

Of particular importance to developing countries were the following structural dimensions of the world economy at the dawn of the 21st Century:

- The Re-contouring of Development Thinking Frontiers
- Globalisation, Regionalism and Localization
- The Redefining of New Rules for the World Trading System
- A New Financial Architecture
- New Information and Communication Technologies

It is generally true that, in any given society and at any given time in a society's continuum of history, the dominant school of economic thought and its basic paradigms will determine the dominance of the perceptions and the forces that are accepted and put into operation in the society as a whole. Thus as the world entered the 21st Century, the landscape of development thinking had entered its final phase of transformation. The new contours of

this landscape are now firmly grounded around the role of the private sector in a fully liberalised global free market environment. Government has been re-assigned a new place and its role has been redefined. Governance, at various levels, has been retrieved from its privileged and insulated place on the mountains of power and brought down -through democratisation and popular participation- into the realms of the people. As a consequence, good governance and peace have become (just as labour and capital were once in the past) recognized as important parameters in development processes. In the new thinking, sustainability, human and social capital and the functionality of institutions are some of the now recognised variables for multidimensional development.

World Trends

Generally, the world economic environment in 1999-2000 was much better for the performance of the North African economies when compared to the world economic environment during the preceding period of 1998-1999. Overall, the world economy had improved growth of 3 percent in 1999 accelerating to an estimated 3.5 percent in 2000. There was a continued improvement of employment in the industrialized countries and a continued effectiveness of monetary policy instruments particularly interest rates in the United States and the European Union in order to reduce inflationary tensions.

One of the most significant features of the world economic environment in the period was the recovery in oil prices that started fledgling towards the end of the first quarter of 1999, steadied into a rebound at the beginning of the second half of 1999 and then continued on to climb to an unexpected peak of US\$ 30 a barrel by June 2000. This turn around was remarkable and dramatic because it followed immediately in the wake of a significant slump in oil prices in 1998 –a slump that saw the price of oil go below US\$ 10 a barrel.

Another significant event that occurred during the period under review was the introduction of the Euro in January 1999 as a common currency uniting 11 European countries. While the direct and observable impact of this event on the economies of the North African countries has to be given time to become more manifest and discernible in its own right, it is still important to flag the fact that the launching of the currency has definite potential repercussions on the North African economies. The most important potential repercussions of the Euro for the countries of the sub-region are well analysed in a 1999 report by the Islamic Centre for Development of Trade (ICDT) entitled: *The impact of the Euro on*

OIC Member States. Of course, the impact of the Euro on the economies of North Africa will depend mainly on the volume of trade that these countries have with the 11 countries of the Euro; the extent to which the foreign assets and earnings of the countries of the sub-region are denominated in dollars or Euros; and the degree to which the local currencies of the countries of the sub-region are tied to the Euro as opposed to the dollar. During the period 1999-2000, there were reports from some North African countries that their export earnings had been adversely affected by the Euro's poor performance vis-à-vis other major currencies.

1.2 North Africa and Other African Sub-regions

Africa's Initial Conditions

On its part, the Economic Commission for Africa extensively analysed the 'Initial Conditions for Africa's Development in the 21st Century' in its *Economic Report on Africa 2000*. Some of the most striking and, perhaps shocking, findings of this report include the following:

- Africa entered the 21st Century as the poorest and least developed, the most technologically backward and the most indebted of the continents. Africa was thus on the margin of the world economy producing less than 2 percent of the world's GDP although it accounts for 12.5 percent of the world's population. In 1998, the single country of Italy had GDP of US\$ 1171 billion which was more than twice as much the GDP of US\$ 535 billion for all African countries combined. No less significant is the fact that, towards the end of the 1990s in 1997, the total revenue of merely four of the large multinational companies of the world (General Motors, Ford Motor Company, Mitsui & Company and Royal Dutch/Shell) was higher at US\$ 593 billion than the whole GDP of Africa at US\$ 518 billion in the same year.
- The African region witnessed one of the most prolonged economic stagnation on record. For more than a quarter of a Century between 1973 and 1999, the African region as a whole showed an average increase in real per capita income of less than 1 percent per year. It is indeed estimated that if every country in the region had only managed to maintain its 1960-1973 per capita growth, the per capita income of Africa would now be US\$3141, which is almost five times its actual level. In absolute terms, the prolonged economic stagnation of the African economies lost the African region well over US\$1.5 trillion during the period 1973-1999.

- While Africa as a whole exports no less than 20 percent of its GDP, its share in total world exports of goods at the beginning of the 21st Century had significantly declined from 3 percent in 1990 to a mere 2.0 percent in 1998 while its share in total world exports of services had declined from 2.4 percent to 2.0 percent during the same period.
- At the turn of the Century, well over 50 percent of Africa's population were still merely on the margins of survival fraught with endemic poverty, malnutrition and diseases, poor or inadequate housing and without steady formal employment. At overall per capita income levels of only US\$ 688 by the turn of the Century, an average African, in a year, survives on less than 3 percent of the income that an average American or Swedish lives on in the same year. This is equivalent to the average African surviving for one whole year on only one and half weeks income in America or Sweden.
- The African human capital had experienced little improvement by the end of the 20th Century. The health of the African peoples had continued throughout the 1900s to be ravaged by malaria and had started to show the disastrous impact of the HIV/AIDS pandemic and the resurgence of tuberculosis. The overall result of these scourges is that while life expectancy in Africa (excluding North Africa) had risen from 44 years in the 1950s to 59 years in the 1990s, it was projected to drop back to 45 years between 2005 and 2010.

**North Africa and
other
African Sub-regions**

With a total population of 170.3 million, the seven countries of the North African sub-region account for about 22 percent of the total population of Africa. However, in 1999, these seven countries accounted for as much as 40.4 percent of the total GDP of the African region. Thus, while there is no intention to give the impression of an Africa divided between North Africa and sub-Saharan Africa it is, nevertheless, important in the context of a structural analysis of economic and social conditions in North Africa, to highlight some significant differences between the bleak picture of Africa as a whole at the turn of the Century (as depicted above) and the relatively promising base of the North African economies by the turn of the century. Below are some selected sub-regional comparative indicators at the dawn of the 21st Century that are shown in the various illustrative graphs in Figures 1 to 13.

1. GDP Shares and GDP Growth: 1999
2. Population and Per capita Income: 1999
3. Sectoral Shares of GDP: 1999
4. Inflation Rates (Simple Averages): 1999
5. Investment Rates: 1991-1996
6. Foreign Direct Investment: Average 1993-1998
7. Life Expectancy: 1960 and 1997
8. Adult Literacy Rate: 1960 and 1995
9. Primary School Enrolment Ratio: 1960 and 1996
10. Potential to Achieve Industrialisation.

It is also equally pertinent to take note of the emerging reality that many features that dominated economic life in the Arab countries (i.e. the Middle East and North Africa or the MENA region) are changing both in form and substance. Not only is a new generation of leaders emerging in the area but also a new breeze of socio-economic liberalisation is blowing on both societies and economies. Whereas growth in the past Century was driven by public investments especially from government oil revenues, the private sector (including foreign private investors) is becoming, in many Middle East and North African countries, the new vehicle of economic progress. This is evidenced by, *inter alia*, the increasing activities of local capital markets, the upsurge in the banking sector in general and the growing interest of foreign investors in the opportunities that the countries of the sub-region have to offer.

Figure 1 : GDP Growth Rate (%) 1999

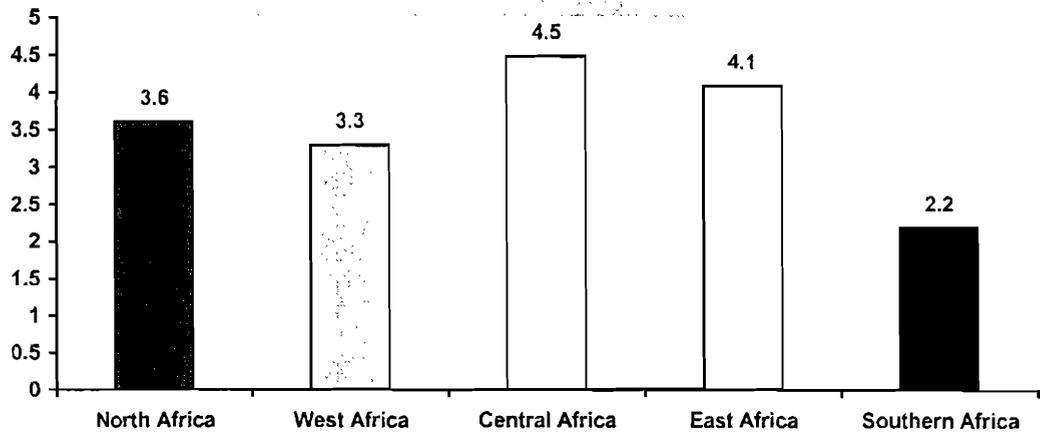


Figure 2 : Population Share 1999

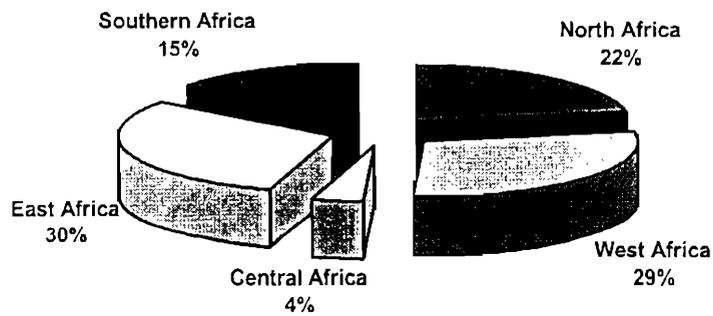


Figure 3 : Per capita Income Growth 1999

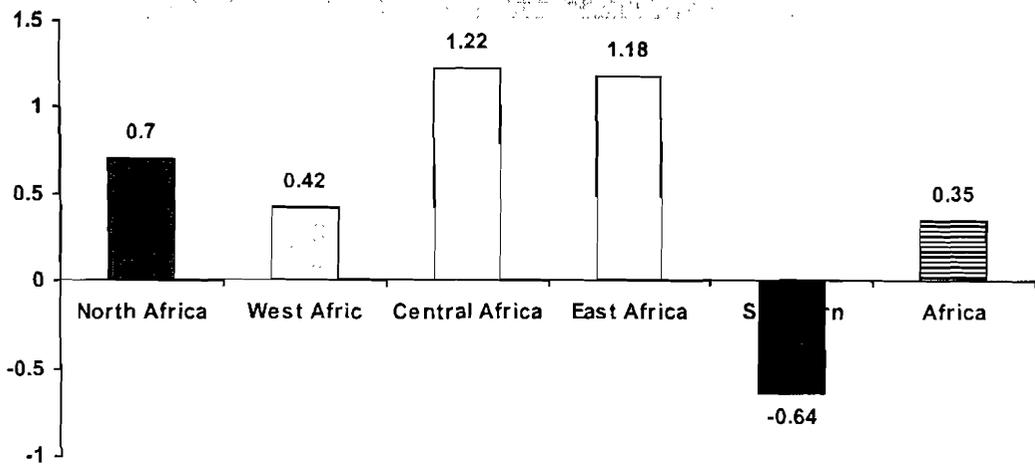
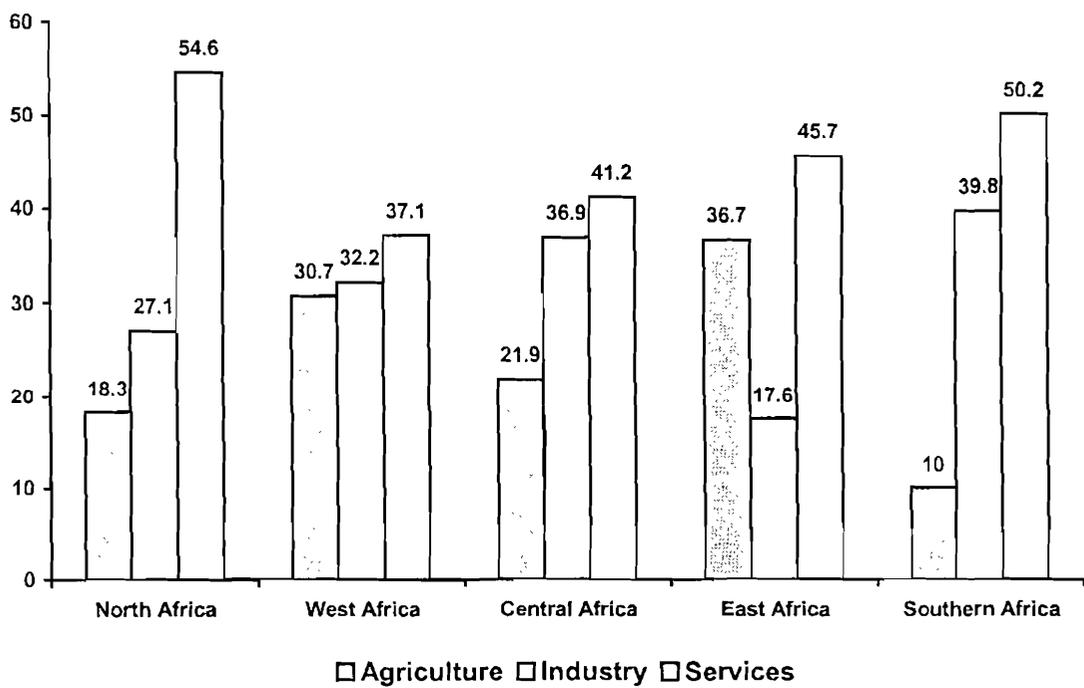
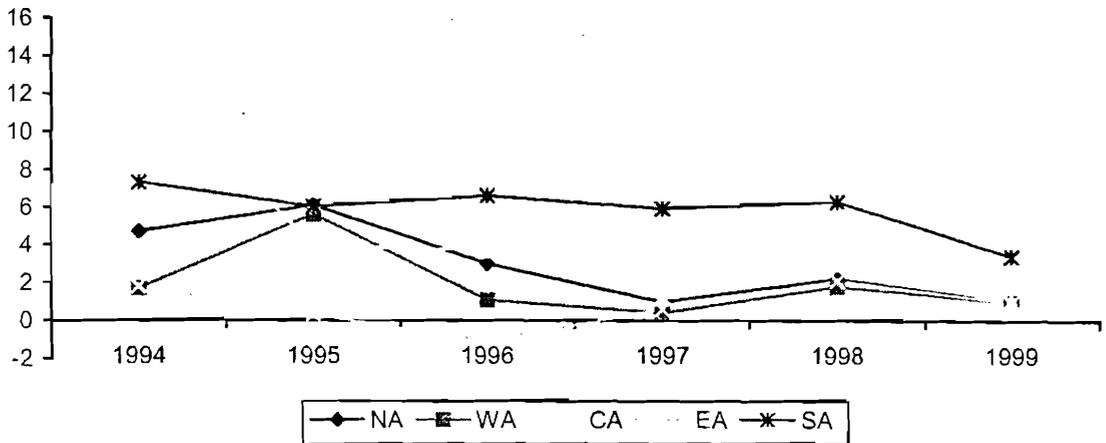


Figure 4 : Sectoral Shares of GDP 1999



**Figure 5 : Trends in Inflation Rates in the different subregions
(Minima)**



**Figure 6 : Trends in Inflation Rates in the different subregions
(Maxima)**

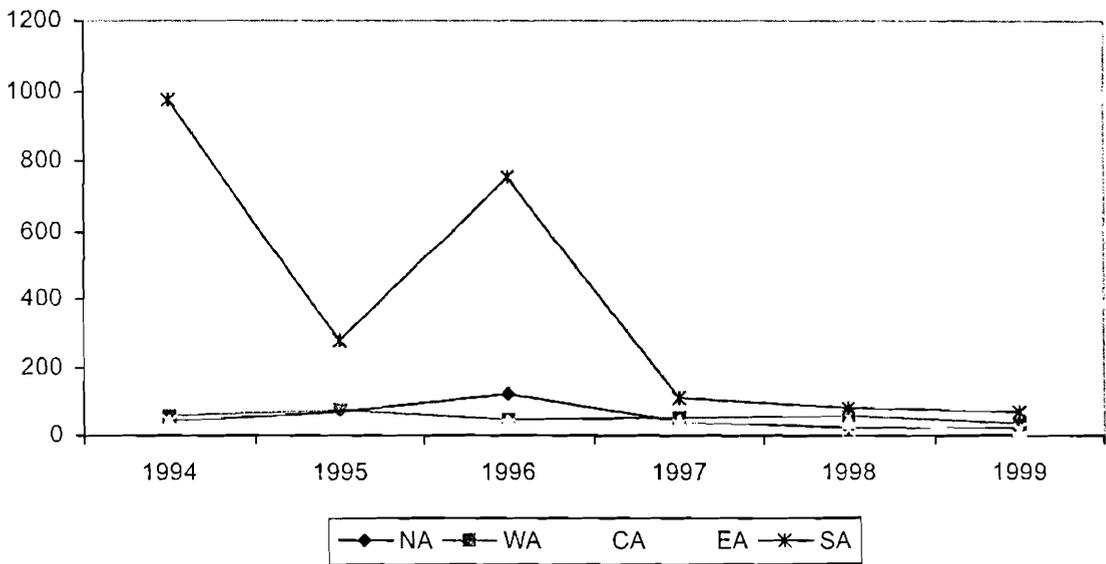


Figure 7 : Investment Rates in Africa 1991-1996 (%)

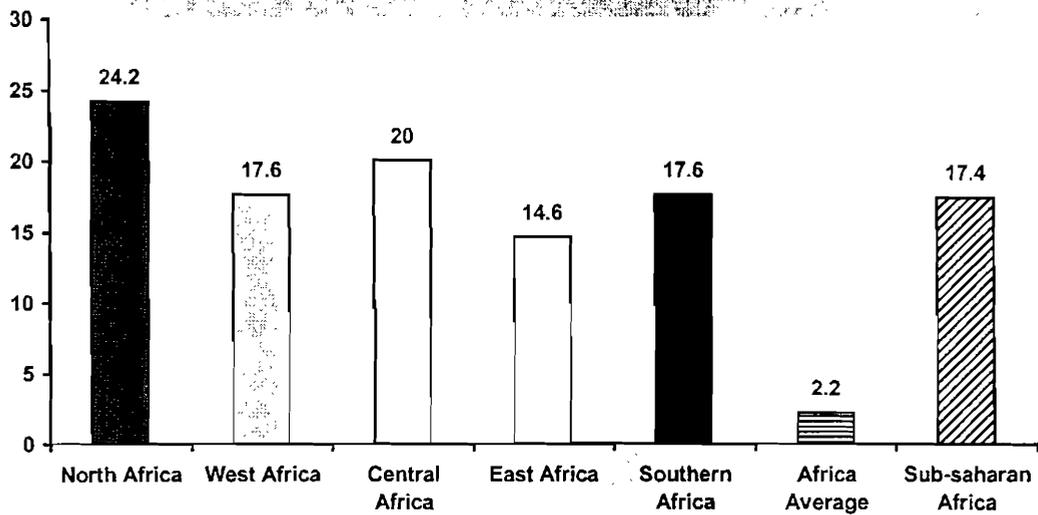


Figure 8 : FDI Inflows to Sub-Regions of Africa as a Percentage of the Region 1993

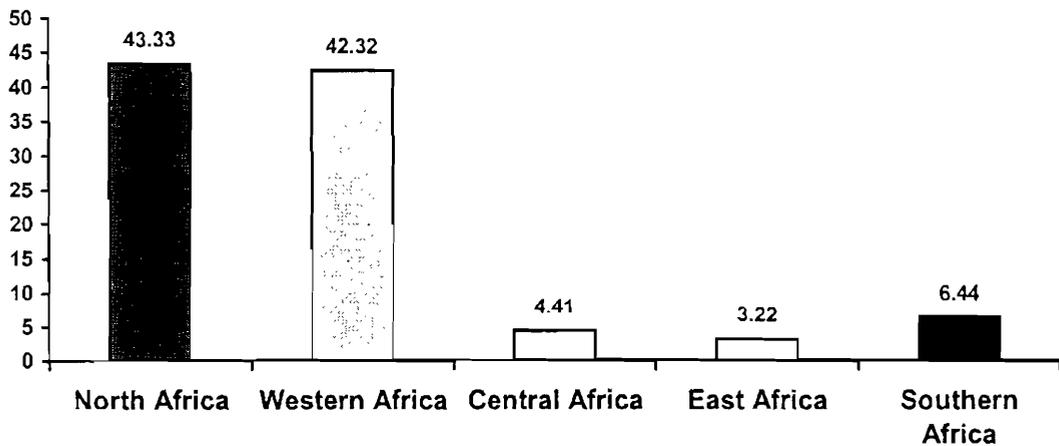


Figure 9 : FDI Inflows to Sub-Regions of Africa as a percentage of the total inflows to Africa 1996

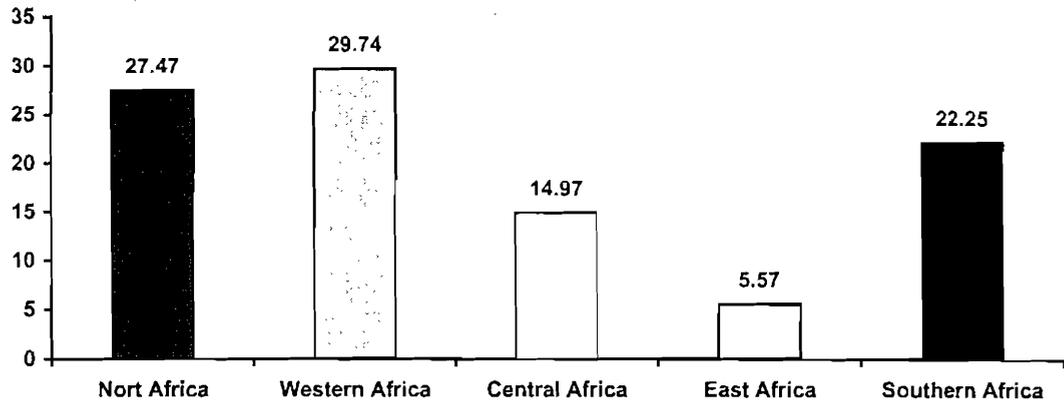


Figure 10 : Life expectancy 1960 & 1997

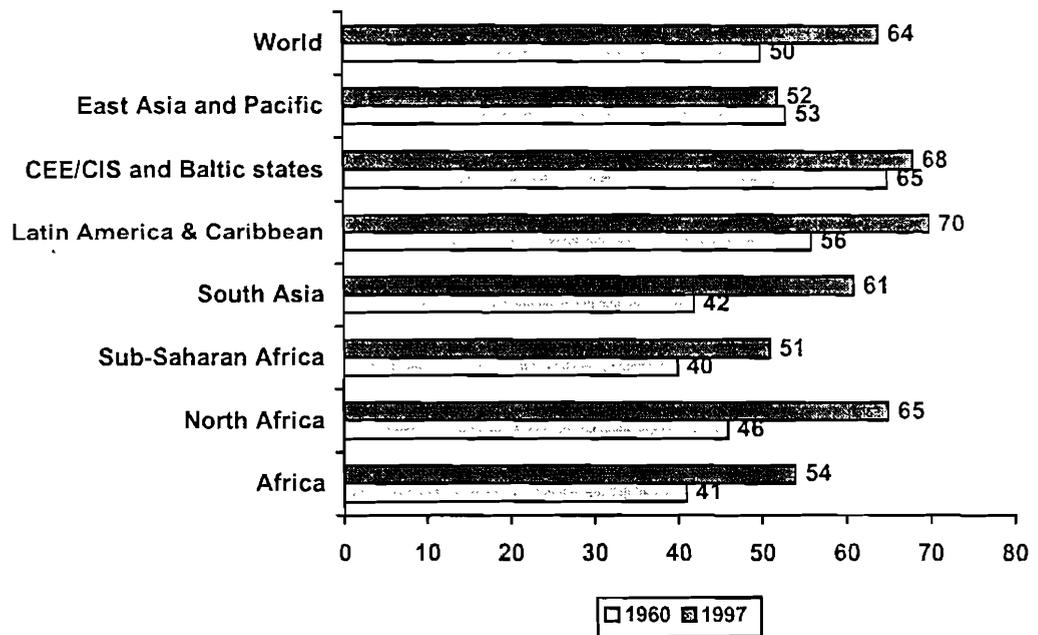


Figure 11 : Adult Literacy Rate : 1960 and 1995

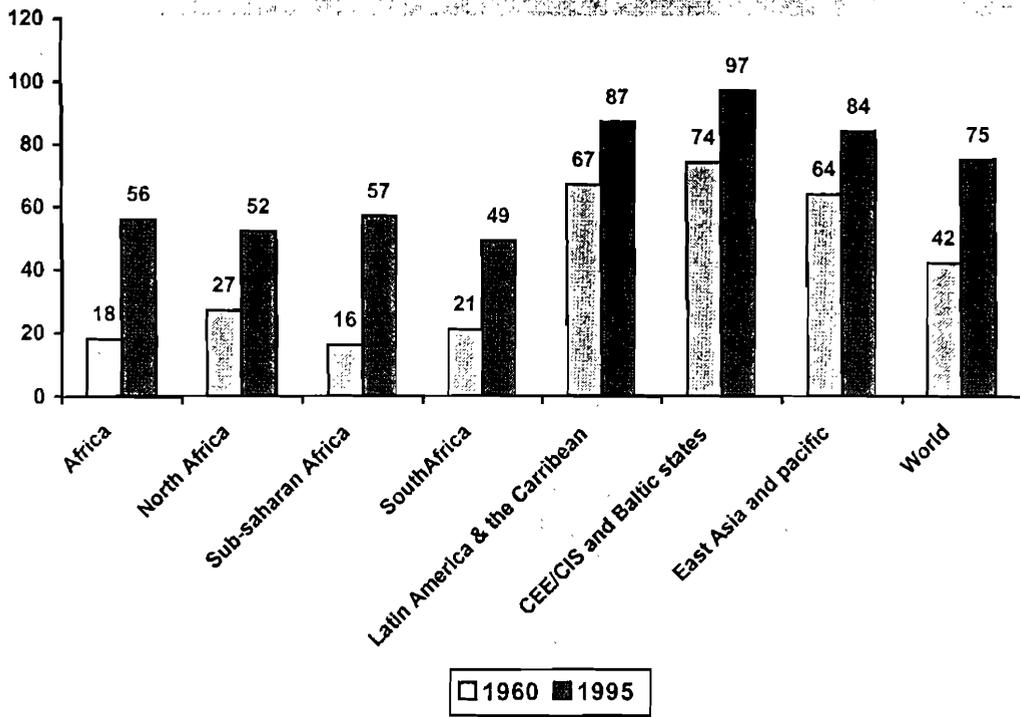


Figure 12 : Primary School Enrolment Ratio : 1960 and 1996

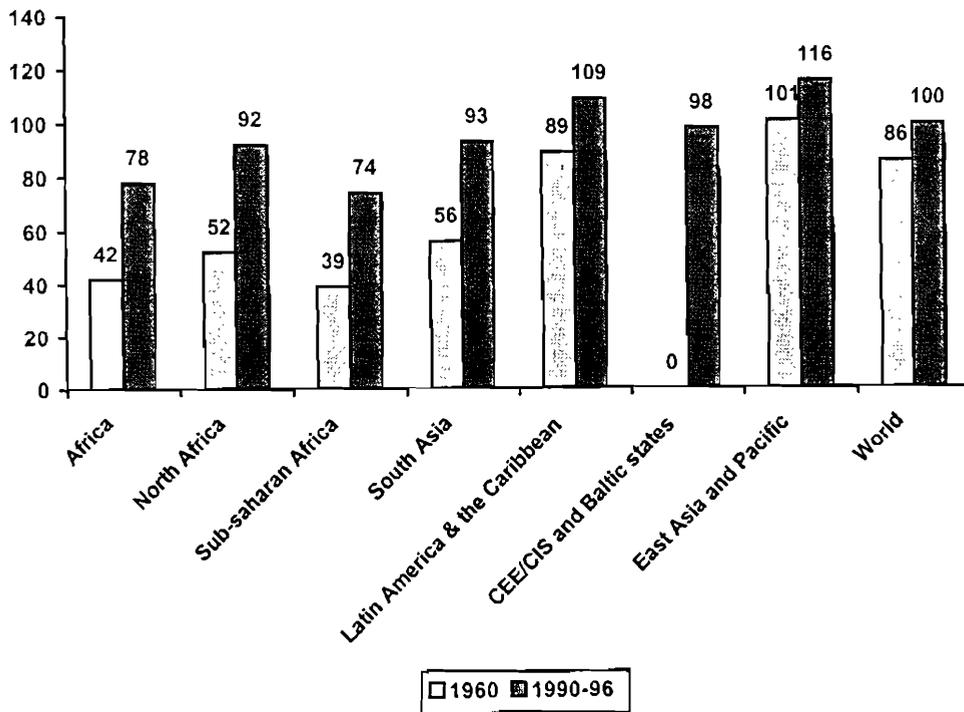
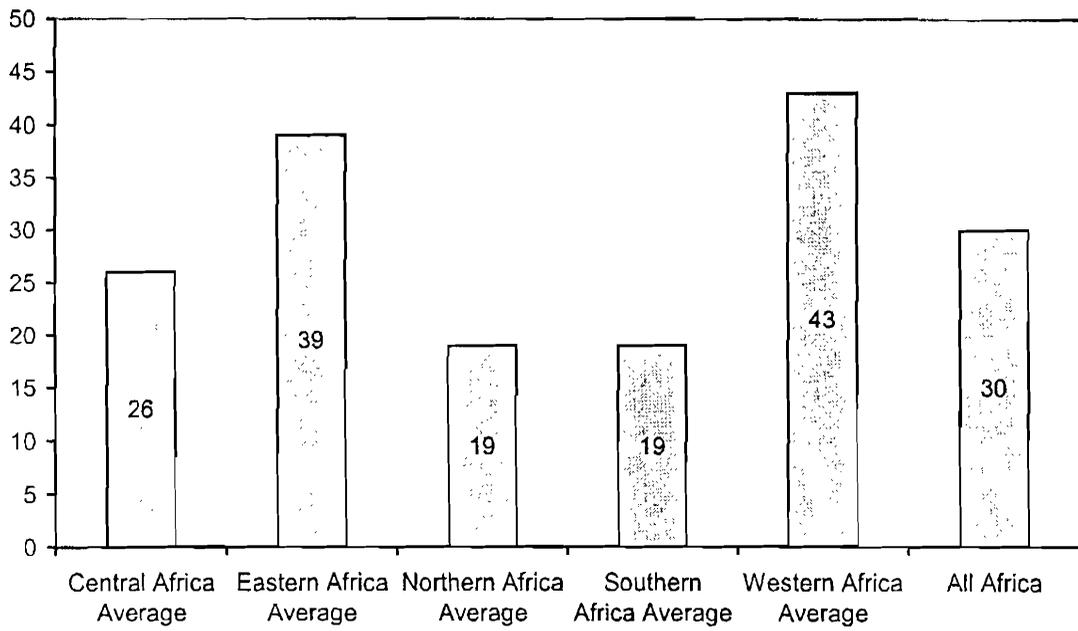


Figure 13 : Number of years to attain Industrial Maturity (with real per capita GDP of US\$5224) at the 4.2 percent - growth rate that reduces poverty by half by the year 2015



SECTION II

SOME STRUCTURAL DIMENSIONS OF GDP GROWTH AND EXPENDITURE

2.1 Factors Affecting GDP Growth

The trends in GDP growth for the seven countries in the North African subregion are summarised in Figure 14. As has been emphasised in the earlier *Surveys of Economic and Social Conditions in North Africa*,¹ the performance of the countries in the sub-region is highly dependent on three major factors namely:

- i. The international economic environment in general and oil prices in particular;
- ii. The climatic conditions and their impact on the agricultural sector;
- iii. The maturing of those reform programmes that were embarked upon and/or are being pursued during a given period in time

These factors emerged again during the 1999-2000 period as the key to the growth trends in the different countries of the North African sub-region. For example, some countries such as Algeria and Libya recorded good performance in the overall economic performance of their respective economies almost exclusively as a result of the significant increases in oil prices during the period. The performance of other countries such as Morocco suffered from adverse climatic conditions while the Sudan maintained its growth mainly as a result of the good agricultural outturn. Other countries such as Egypt, Mauritania and Tunisia seem to have derived the robustness of their economies during 1999-2000 primarily from the maturing or continued pursuance of their respective economic reform programmes.

Of course, it is to be expected that the above factors will, in one form or other, affect all the economies in the sub-region. The international economic environment as well as the climatic conditions will, for example, affect all the countries in the sub-

¹ See for example the *Surveys of Social and Economic Conditions in North Africa*, for 1996-1997; 1998-1999

region. Similarly, all the economies of the countries of the sub-region will show the impact of the reforms undertaken or under way. However, with respect to the seven countries of the sub-region, there has been a trend showing that, during any given period under review, there is a dominant factor that largely, if not entirely, determines the performance outcome in each individual country.

The policy preoccupations of each country concerned also give some indications of the dominance of any particular factor either structurally or during the specific period under review as illustrated by the following examples:

- For Algeria, the *Conseil National Economique et Social* specifically identified the excessive impact of the international economic environment as a major issue that has to be addressed with emphasis on three basic variables given in order of their relative importance: price of oil; value of the dollar; cost of food imports especially cereals.
- Libya has been emphasising the need to diversify the Libyan economy away from oil and gas and Libyan policy makers are reported to be eager to attract foreign investments beyond the energy sector into new areas such as tourism.
- Morocco, on its part, has shown great concern about the negative impact of fluctuations in agricultural performance and has, as a consequence, launched programmes aimed at minimising the impact of the shortening cycle of drought on the agricultural sector and, as a consequence, on the economy as a whole.
- Tunisia's economic policies for the new Century relate mainly to maintaining high economic growth rates and industrial modernisation and, consequently, focus on (i) reducing unemployment; (ii) increasing investments including investments in infrastructure; (iii) boosting exports and international competitiveness; (iv) encouraging information technology development; (v) continuing to deregulate the Tunisian Dinar; (vi) establishing free-trade arrangements with other Arab States such as those of UMA.

From the above, the dominant factors that affected economic performance in the different countries of the sub-region during the 1999-2000 period are summarised in the Table 1 below and are further elaborated upon in the subsequent sections.

Table 1 : Dominant Factors Affecting Economic Performance, 1999-2000

Country	Dominant Factor in 1999-2000
Algeria	Oil Prices
Egypt	Maturing of Reforms
Libya	Oil Prices
Mauritania	Need for Reforms
Morocco	Weather and Agricultural Performance
Sudan	Weather and Agricultural Performance
Tunisia	Maturing of Reforms

Oil Prices Dependent Economies

Of the seven countries of the sub-region, five countries were producing oil by 1999 as is summarised in the Table 2 below. However, of the five oil-producing countries in the sub-region, two economies namely those of Algeria and Libya, which are members of OPEC, have structurally been oil-dependent economies and their performance has always been influenced by developments in the international oil market. This remained true both in 1999 and 2000 and will most likely remain true for some time to come.

Table 2 : Production of oil in North Africa 1997-2000 ('000 barrels a day)

	1997	1998	1999
Algeria	850	816	787
Egypt	840	810	785
Libya	1390	1378	1332
Sudan	-	-	140
Tunisia	80	80	82

Source: MEED; Vol. 43 No 29 of 23 July 1999

The fortunes of the Algerian economy are tightly linked to the ups and downs in the international oil market. The hydrocarbons sector accounts for as much as around 97 percent of exports, 35 percent of GDP and more than half of government revenue. It is, thus, within expectations that the performance of the Algerian economy as a whole drastically changed for the better with the upward upsurge in oil prices during the 1999-2000 period. Towards the

end of 1999, Algerian authorities estimated that the first half of 1999 had involved deterioration in the overall performance of the economy due to the oil slump during this particular period. During this period of depressed oil prices, the Algerian economy went through bleak times with an increase in the expected budget deficit and a drastic fall of 32 percent in foreign exchange reserves from US\$ 6.8 billion at the end of 1998 to US\$ 4.6 billion by June 1999. When, in April 2000, the Conseil National Economique et Social (CNES) examined the Algerian economic and social situation in 1999, the general conclusion was that the performance in 1999, had not been particularly remarkable and had not particularly affected the trend of stagnation that had characterised the Algerian economy in the past few years.

But, all this was to change with the recovery in oil prices starting in the second half of 1999 and peaking in the first half of 2000. Thus, when the Algerian budget for 2000 was passed, a growth rate of 5.0 percent and a budget deficit of 6.3 percent were envisaged on the prudent basis of an average oil price of US\$ 15/barrel. As it turned out, the oil prices increased to almost twice the budget's cautious assumptions. If the fact that for every one-dollar increase in oil prices Algeria reaps an extra AD30 billion in revenue is taken into account, there is no question as to why Algeria had a good performance in 2000 as compared to 1998 and 1999. While the economy is estimated to have recorded a trade surplus in 1999 of a respectable US\$ 4.4 billion, this surplus most certainly increased further in 2000.

The confluence of the suspension of UN sanctions as of 6 April 1999 and the recovery in oil prices in the second half of 1999 was a boon for the Libyan economy resulting in windfall revenues and a flurry of activities both by governments of European countries eager to nurture a new start with Libya and by private external investors attempting to re-open old doors or break new grounds in the Libyan market especially in the oil, gas, tourism and infrastructure sectors. The embargo is estimated to have cost the Libyan economy, in terms of lost revenue, a total of US\$26 billion since its imposition in 1992-1993 averaging at a loss of nearly US\$ 4.0 billion annually. Prior to these events, the prospects for the Libyan economy were so unpromising that the government budget for 1999 was initially set a very pessimistic assumption that state revenue from oil would be only around US\$5.3 billion or 35 percent below original forecasts.

Agricultural Dependent Economies

Historically, much of the measurable economic activity in the Sudan has been based on the agricultural sector. The recent favourable evaluation of Sudan's performance by the IMF also confirms that the estimated 5 percent annual expansion in the country's economy between 1995 and 1998 was driven by an equivalent growth of 5 percent in the agricultural sector between 1992/1993 and 1997/1998. Thus, although Sudan started pumping oil exports on 31 August 1999, the structural predominance of the agricultural sector is still evident and is likely to remain for some time.

Morocco's economic performance in 1999 was poor as there was an overall decline in GDP in real terms of -0.1 percent. This compared very unfavourably with the good performance in 1998 when GDP growth was 6.3 percent. This dramatic downturn in Morocco's economic performance in 1999 is mainly attributable to the drought that afflicted the agricultural sector resulting in a poor harvest. To stress the vulnerability of the Moroccan economy to climatic condition it is to be noted that in 1999 most of the non-agricultural sectors had a relatively good performance: mining saw a rise of 13 percent in phosphate exports; manufacturing output increased and the communications sector was in a boom that, *inter alia*, set a record for the highest price quoted for a global standard for mobiles (GSM) telephone system.

On the basis of studies that have tended to show that the drought cycle has shortened in the 1990s (the dry season now tends to recur every other year as opposed to every five years in the 1980s), the government launched a programme aimed at insulating the agricultural sector from the impact of the chronic drought. The programme will, among others, extend and improve irrigation infrastructure and thereby boost cereals production that would, in turn, bring about estimated savings of US\$200 million between 1999 and 2002.

Economies Reaping Reform Benefits

It is now widely acknowledged that the application of the stages of Egypt's economic reform programme have helped to create a genial economic environment for boosting investment and growth in the country. It is against this background that GDP in real terms is estimated to have increased by 6 percent in 1999 compared to 5.7 percent in 1998. Three economic trends that were noticeable in 1999 would seem to support the general opinion that Egypt's growth is embedded in a new economic structure that has emerged from the economic reforms. Firstly, the commodity sector's contribution to GDP declined from 49.9 percent in 1998 to 49.7 percent in 1999 with a concomitant rise in the importance of the

production service sectors from 32.1 percent in 1998 to 32.4 percent in 1999. This decline in the share of the commodity sector in total GDP is attributable to a corresponding decline in the share of the agriculture and oil sectors in total GDP, which declined respectively from 17.3 percent and 6.7 percent in 1998 to 17 percent and 6.0 percent in 1999. Secondly, the relative importance of the public and private sectors witnessed a decidedly significant shift in 1999. The contribution of the private sector to total GDP saw as much as a 4-point increase in one single year from 70 percent in 1998 to 74 percent in 1999 (see Figure 15). Thirdly, international investors' confidence seems to have become more solid and stable as evidenced by the many projects that attracted foreign direct investments in 1999 in almost all sectors of the economy. However, in the new economic structure, the Egyptian currency market that saw a rise in parallel market rates in 1999 remained as one of the sore point that has yet to be mastered by appropriate exchange rate policies.

In 1998, it was recognised by both outside observers and Tunisian officials that the Tunisian economy had attained an internal robustness that had enabled it to record a growth rate of 5 percent despite the Asian crisis that had negatively affected world trade and the contraction in Tunisia's agriculture and agro-industries which would normally have had more serious implications on total GDP. It was also generally accepted that this had been possible mainly because the Tunisian economy had started to reap the benefits of economic diversification, wider participation of the private sector and improved productivity that enabled it to be more resilient. The resilience of the Tunisian economy that became quite evident in 1998 continued into the 1999-2000 period. Thus, while the shortfall in the forecast cereal production in 1999 (as a result of record breaking temperatures that damaged the wheat crop in some areas) had repercussions on the Tunisian economy as a whole, a healthy growth trend was maintained.

2.2 Structure of GDP Expenditure

All the major macro-economic indicators that have been the main focus of attention in adjustment programmes of the North African countries have been particularly concerned with the demand side of the economy. This, of course, is equally true of all other countries in all Africa and elsewhere that have been involved in structural reforms since the 1980s. It is within this context that it is assessed useful to first review the structure of expenditure on GDP in the sub-region by the turn of the Century.

Consumption Patterns

From Figures 16 and 17 it is apparent that the seven countries of the North African sub-region have widely varying patterns of consumption expenditure of their respective GDP as is evidenced by:

- i. The high degree of variation in the level of private consumption as a percentage of GDP from a low 55.5 percent for Algeria to a high 89.7 percent for Sudan;
- ii. The high degree of variation in the level of government consumption as a percentage of GDP from a reported very low 8.2 percent for Sudan to a very high 30.2 percent for Libya;

Savings and Investment Patterns

The disparities in consumption rates are naturally mirrored in the disparities in the saving rates of the different countries. However, an interesting feature emerges when the countries are compared with respect to the domestic saving gap. The very high differences tend to be evened out implying that in a number of cases countries have adjusted their investment rates to ensure that the domestic saving rate (which by definition is equal to the ex-post trade gap) is not very high. This evening out of the domestic savings gap further implies that those countries with high rates of consumption have maintained these rates at the detriment of investment. The only exceptions to these trends have been Morocco and Tunisia which seem to have maintained high investment rates despite relatively low domestic saving rates a feature that can possibly be explained by the role played by remittances of Moroccan and Tunisian workers abroad.

2.3 Public Finances

One of the greatest successes of the reforms that the North African countries have been implementing is the control of public finances in general and the budget deficits in particular. It is noteworthy that by the end of the 1990s, this is one of the major economic fundamentals that had been mastered by almost all the countries of the sub-region. The degree of success in fiscal discipline by the turn of the Century was outlined in the Survey of Economic and Social Conditions in North Africa, 1997-1998.

As can be clearly seen in figures 22, 23 and 24 most of the countries have established a culture of fiscal discipline that will be important in the new era of the 20th Century. Algeria's public

finance situation has steadily improved throughout the 1990s. Overall, government revenue increased steadily throughout the 1990s while recurrent expenditures were kept in constant check. These healthy and steady trends enabled Algeria to record budget surpluses in the latter half of the 1990s. The same trend of a consistent decline in the budget deficit is observable in Egypt with the surprising aspect of such a trend being maintained while the share of revenues to GDP is also declining.

2.4 International Trade

Structure of International Trade

In the changing world economy of the 21st Century, it is particularly important that all countries scrutinise the structure of their international trade so as to discern, inter alia, areas that might require strengthening or restructuring especially with regard to diversification and competitiveness.

All the countries exhibit a common characteristic with respect to the preponderance of exports goods versus. export of services. This is, of course, a common feature of all developing nations that depend, in the early stages of their economic growth, on commodity exports. However, in the context of the emerging information age with a global economic structure that is increasingly less dependent on raw material commodities it is important for countries to endeavour to make a breakthrough in the services sector.

Exports Patterns

A close look at the exports component of the expenditure on GDP reveals some surprising features of the pattern of expenditure on GDP. Figure 20 and 21 depict the ratio of exports of goods and services to total GDP. It is clear that, again, there is no general pattern for the region as a whole. Some countries of the sub-region such as Algeria, Egypt, and Sudan recorded a decline in the average ratio of export to GDP in the 1990s compared to the 1980s. This feature is particularly surprising given the fact that it is in the 1990s that these countries undertook reforms that should have made their exports increase. However, a possible explanation for this feature may be that these countries have a high vulnerability of their exports to external factors such as oil price fluctuations for Algeria, the sensitivity of the tourism industry for Egypt and the international embargo for Libya and Sudan. The countries that have established an increased ratio of exports to GDP include Mauritania, Morocco and Tunisia and this may be for a variety of reasons for each of the countries.

Import Patterns

The imports also show very dissimilar and uncharacteristic patterns among the seven countries of the sub-region. Algeria and Sudan show uncharacteristic negative import elasticity, which may be due to either the curtailing of imports in these countries as a deliberate strategy of self-reliance or other phenomena that require more scrutiny to identify. For the other countries that have a positive import elasticities, Mauritania shows an erratic trend with the import elasticity jumping from less than one to well over 4. Only Morocco and Tunisia show the traditional import elasticities of greater than one.

Figure 14 : Long Term Growth Patterns

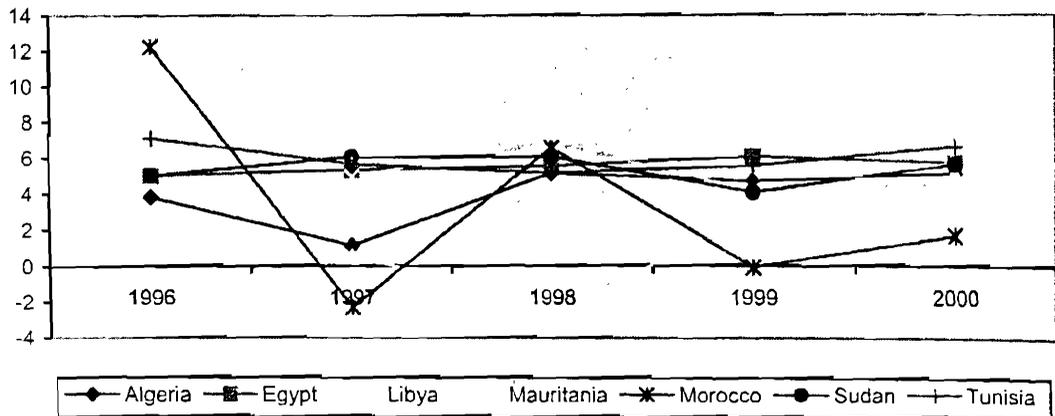


Figure 15 : Overall economic liberalisation by sector (Egypt) 1999

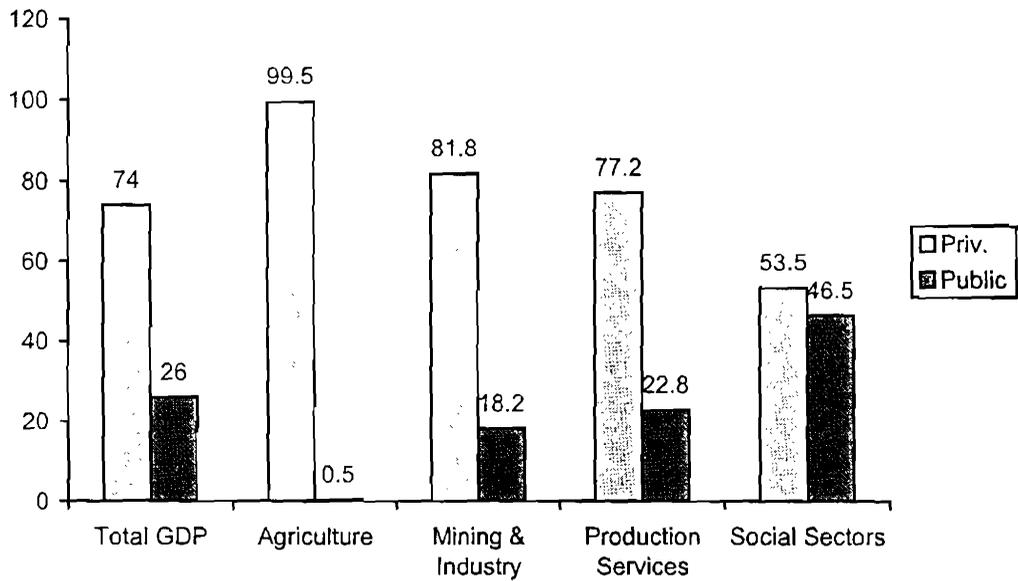


Figure 16 : Total Consumption (% of GDP)

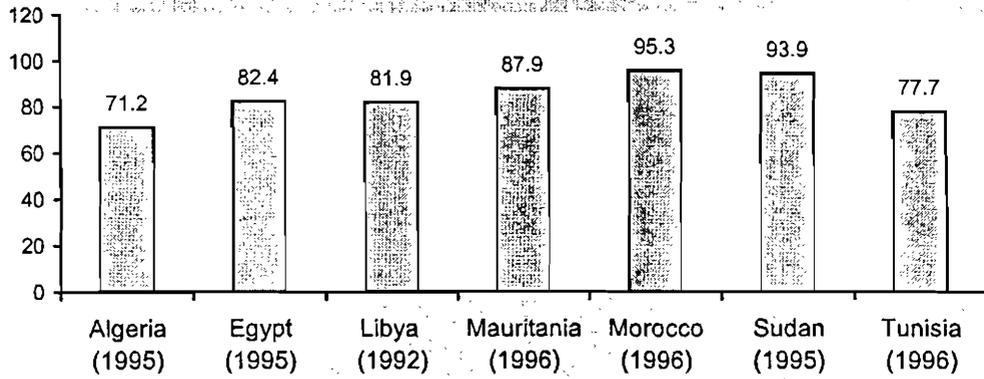


Figure 17 : Public consumption (% of GDP)

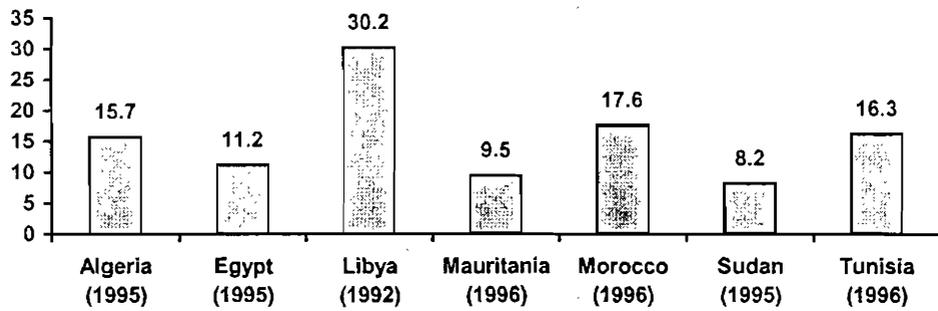


Figure 18 : Average Saving Rate (% of GDP)

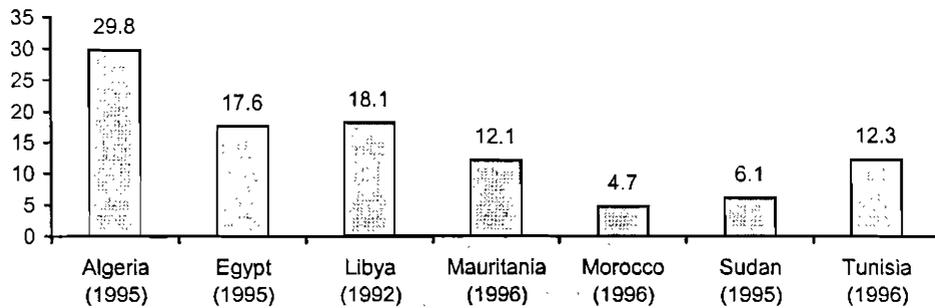


Figure 19 : Gross Domestic Investment

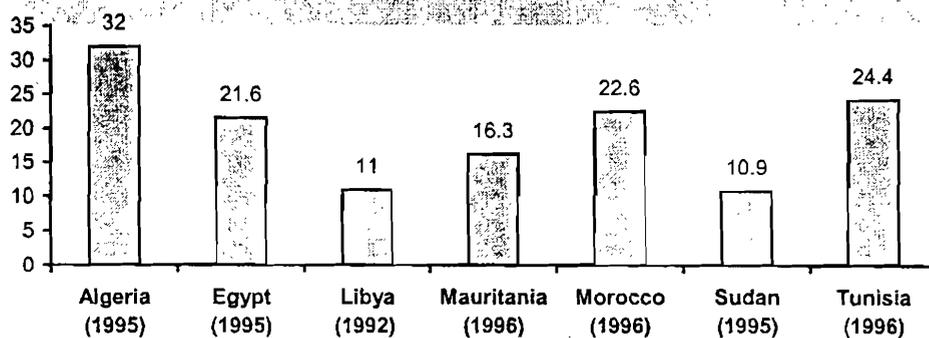


Figure 20 : Export of goods & services

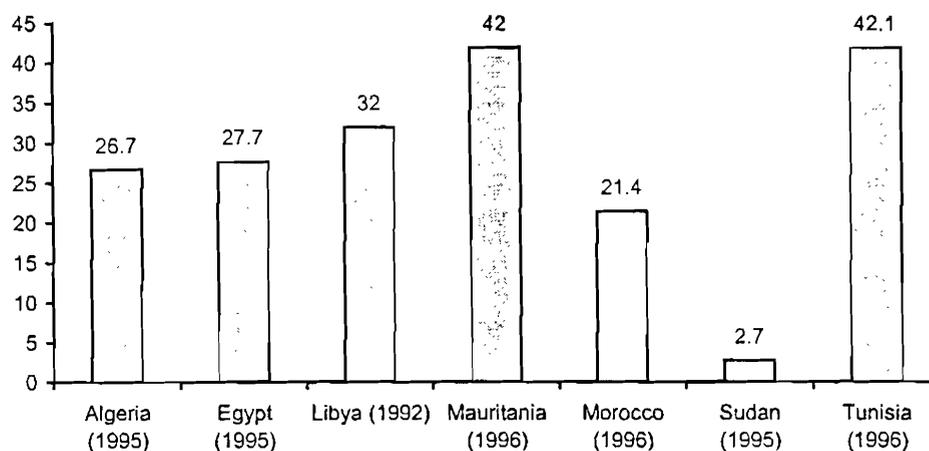


Figure 21 : Imports of goods & services

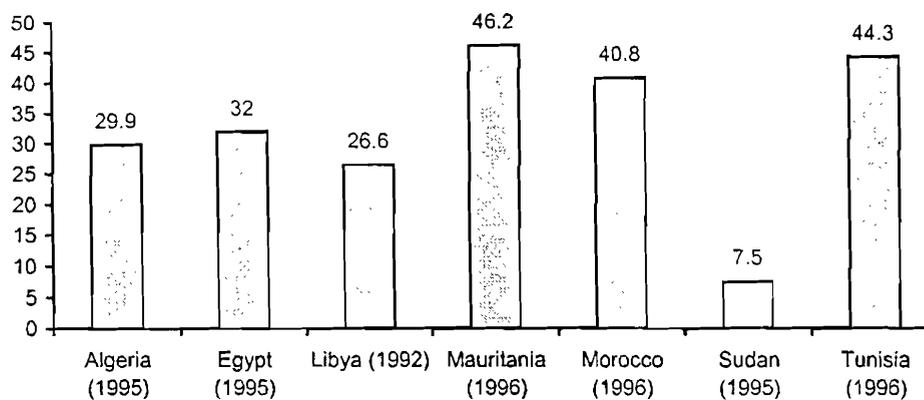


Figure 22 : Share of revenue to GDP

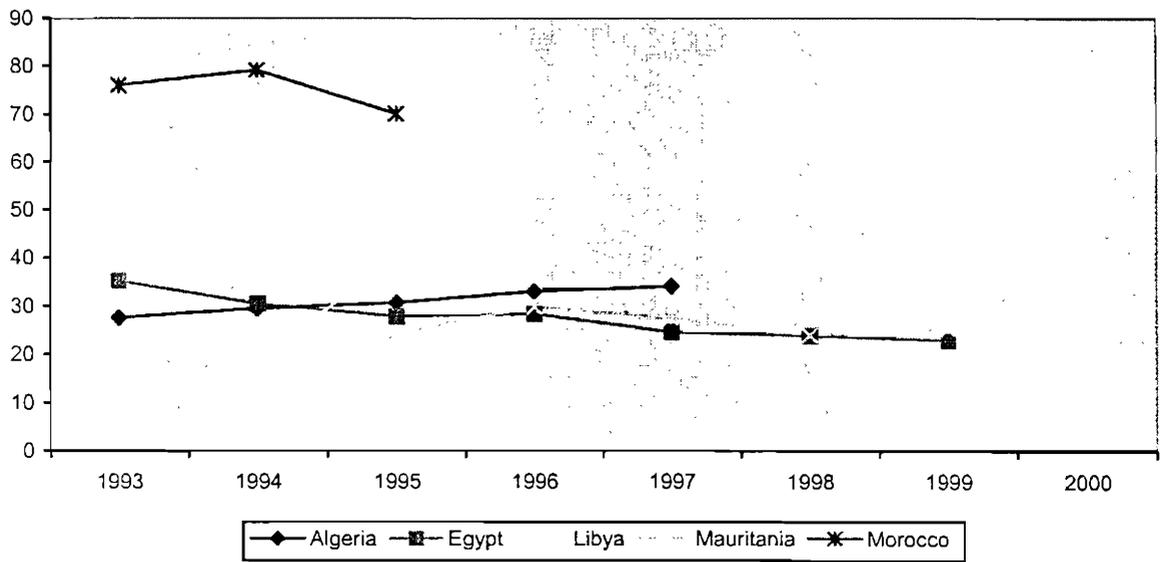


Figure 23 : Total expenditure/GDP

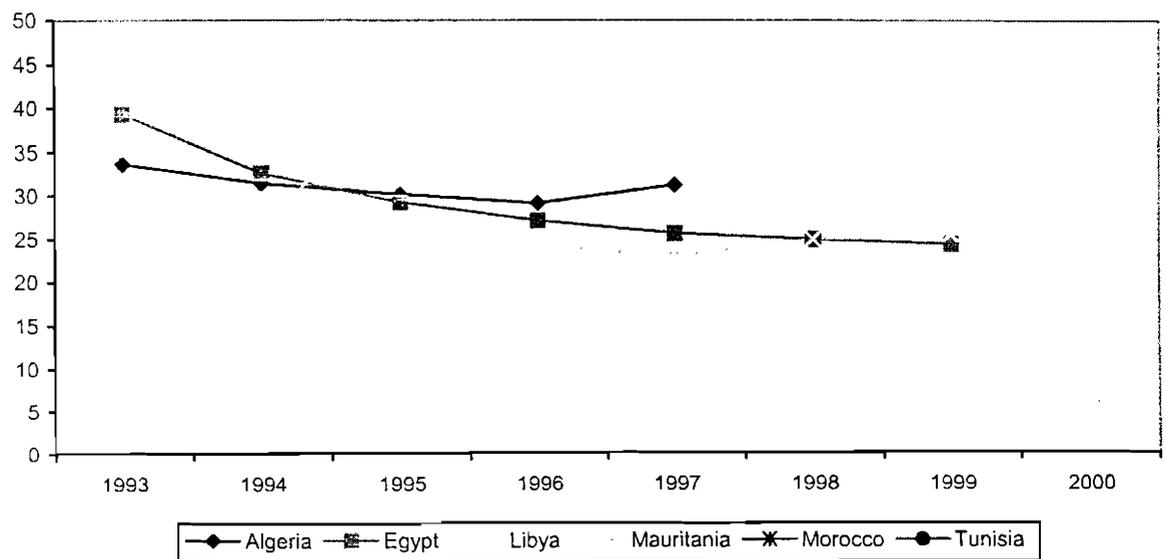
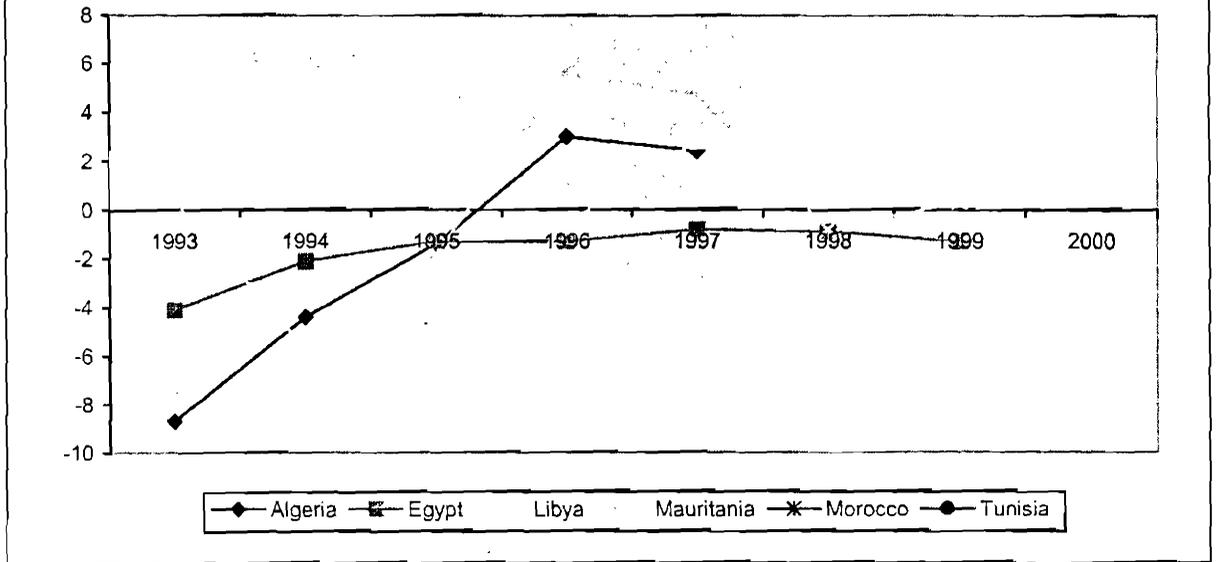


Figure 24 : Deficit on Overall Budget/GDP



SECTION III

STRUCTURAL TRENDS IN SELECTED SECTORS

3.1 Agriculture, Forestry, Animal Husbandry And Fisheries

Structural Dimensions

Structurally, the agricultural sector in North African countries was, by the turn of the Century in the year 2000, still characterised by a high degree of vulnerabilities to the vagaries of nature. However, it must be acknowledged that throughout the sub-region great efforts have been made to alleviate the adverse climatic conditions that affect the agricultural sector in all the countries of North Africa as a result of the generally and chronically hostile climatic conditions. These efforts relate mainly to water management and are highlighted in greater depth in sub-section 3.5.

In Algeria, the agricultural sector structurally employs about 25 percent of the labour force and accounts for 9-13 percent of GDP depending on the year harvests and movements in the other sectors especially the oil sector. The most important structural issues that were still evident in the agricultural sector in 2000 include:

- Stagnation of cereal yields in certain zones due to lack of water and also to the quality of untreated seeds;
- Low rates of investment growth in the agricultural sector;
- The non-renewed productive agricultural capital as a result of low investments in the sector;
- Insufficient down- and up-stream agricultural support systems;
- Fragility of the material and instrumental conditions.

According to Algeria's official analysis, the overall transformation of the present traditional agricultural sector into a modern and more productive sector remains a delicate and slow process that requires considerable effort and resources. Elements of an approach to deal with some of the structural bottlenecks in the sector include (i) land reforms that will involve property rights; (ii) deepening of the agricultural reform programmes already underway to bring about more security for farmers and attract more investments in the sector; (iii) creation of joint ventures with foreign companies in the sector so as to obtain external loans, transfer of new techniques and more access to external markets.

For Egypt, the most important structural element that has long-term implications for the agricultural sector as a whole is the observable shift in the agricultural crop mix. At the close of the last Century in 1999 agricultural output showed significant differences in the performance of the different crops. While most of the crops registered increases in output of over 5 percent relative to 1998, the output of a number of crops declined drastically as a result of decreases in the areas under cultivation and/or decreases in yields per unit area. The most important of these crops include rice (-18.8 percent); un-ginned cotton (-31.6 percent); sesame (-21.2).

An important policy in 1999 was the full liberalisation of cotton prices involving the pricing of cotton in the domestic market according to international prices and abolishing the government guaranteed minimum price in the transitional stage. The cotton harvest for the 1999/2000 season will most likely follow the downward trend recorded in the 1998/1999 in the total area under cultivation such that even if increased yield might bring some compensation for the trend overall cotton output in 2000 will decline further.

In Mauritania, the major structural problems that have always plagued Mauritania's agricultural sector is the scarcity of fertile lands (less than 3 percent of the total land is arable and about 10 percent is pasture), the very low rainfall (averaging only 200 millimeters per year), the encroachment of the desert (at about 6 kilometres every year), lack of qualified manpower and equipment as well as the damage to harvests by insect attacks particularly the *sesamie* insect that destroys sorghum, millet, sugar cane, maize and rice crops.

For Morocco, the outcome of agricultural activities is in any given period particularly important for the economic performance of the Moroccan economy as a whole although it accounts for about only 14% of total GDP. Agriculture has a decisive role in food security in the country and constitutes the spinal cord of national development.

Measures taken by the government to combat the negative effects of drought include particularly:

1. Assistance concerning insurance;
2. Enhancing indebtedness capacity of farmers and providing security for them against the adverse effects of drought;

3. Assistance by providing production factors;
4. Providing incentives for private investment in the agricultural sector in the framework of Agricultural Development Fund through the allocation of subsidies to intensify animal and crop production.

In the framework of its policies to address the drought phenomenon, the Tunisian government launched a programme of agricultural systems transformation based on the principle of shifting from managing drought effects to the policy of managing drought by adapting crops to their natural environment.

Despite sufficient rains recorded after a relatively dry period, the cereal harvest in Tunisia for the 1999-2000 season will not be as good as expected with results one third less than the average in view of the erratic rainfall. Therefore, based on available information the harvest will be above average, that is to say about 1 million tons compared to an average annual production of 1,700,00 tons.

Given the strategic importance of cereal production in the subregion as a whole, the structural trends between 1995 and 1999 are given for the individual countries in the Figure 26 outlining production, exports and imports. Overall, the structural issue is that cereal production in the countries of the subregion has not increased significantly especially in relation to the population growth (see Figures 25 and 26).

As for agricultural production, the last years of the 20th century were hardly favourable despite the spectacular recovery witnessed by all the countries of the sub-region in 1998. In 1997, production decreased substantially because of adverse climatic conditions. However, in Egypt, agricultural production, especially cereals, registered a slight decline.

In 1999, production decreased slightly again in the sub-region because of a sharp decrease in the production in Sudan, Algeria and Morocco where insufficient rains and reduction of cereal fields lead to the decline of cereal harvests by almost half.

For example recent data on the cereal harvest for the season 1999-2000, indicate a disastrous situation for the majority of the Maghreb countries especially Algeria, Morocco and Tunisia.

In Morocco the harvest amounted for 1,820,000 tons, that is to say a decrease by more than 50% compared to the harvest of the previous season which was considered mediocre and represented only 36% of the average during the last five years. It is the lowest level of production registered since the season of 1994-1995, which witnessed the severest drought in the century. The crop which suffered most because of drought was barley and the production declined by 75% compared to the average registered during the last five years. Hard wheat production declined by 65% and soft wheat by 35%.

In Algeria, the harvest during the 1999-2000 season suffered as the previous ones by lack of rains. According to the most optimistic estimates almost half of the cultivated lands were affected by the phenomenon. Emergency measures taken by the government included supporting irrigation and opening new waterholes.

The amount of the cereal production in the 1999-2000 season was around 920,000 tons whereas the potential production at the national level was around 2 million tons. The decline in the cereal yield (average yield of less than 0.9 tons/ha) is attributed to many factors including particularly the climatic conditions and problems of technical nature.

Figure 25 : Trends in cereal production in North Africa as a whole

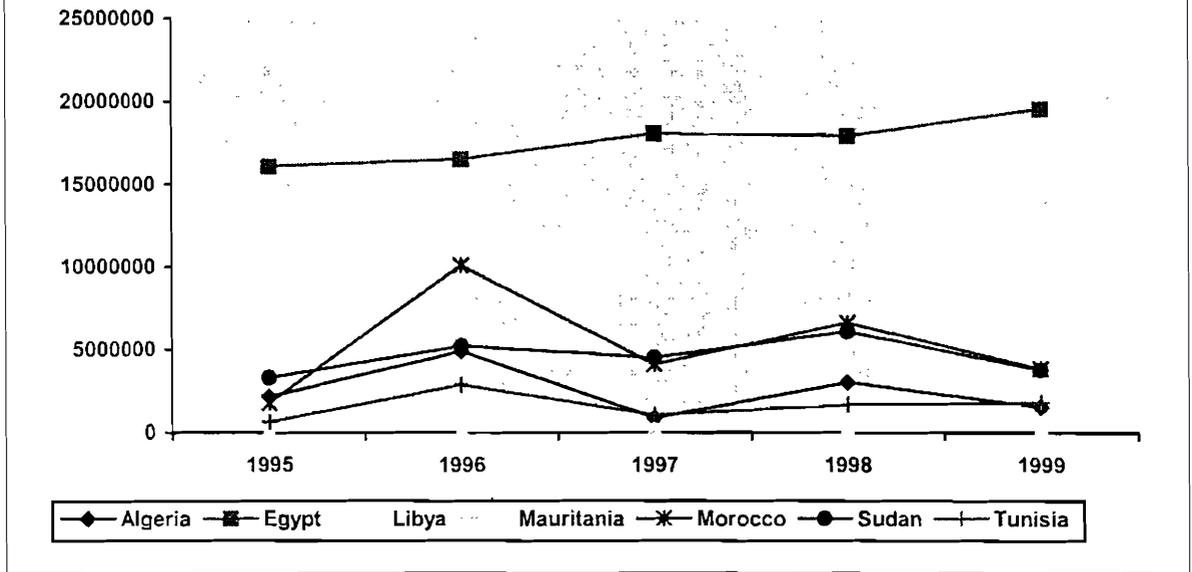
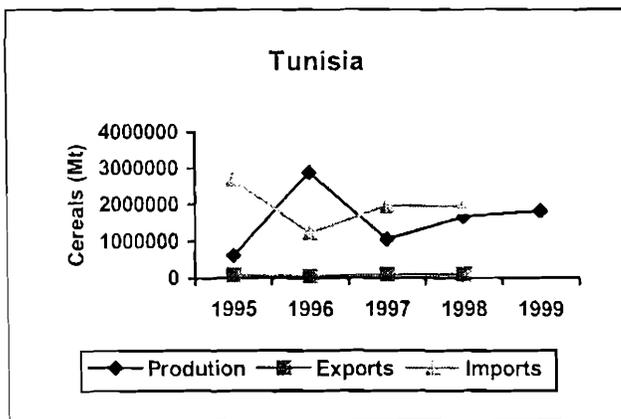
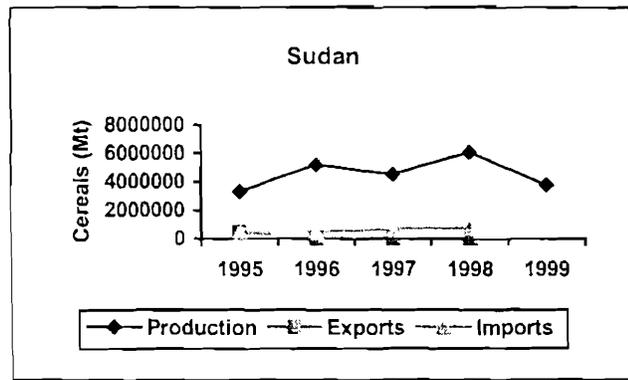
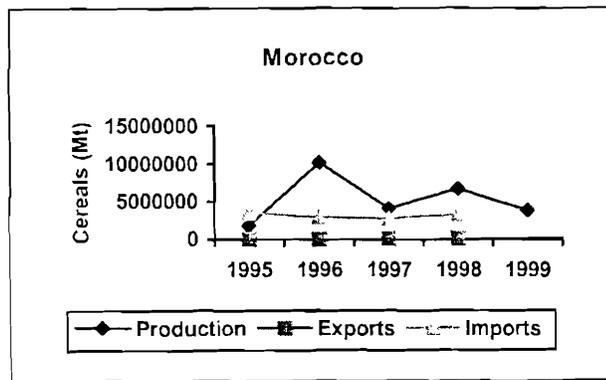
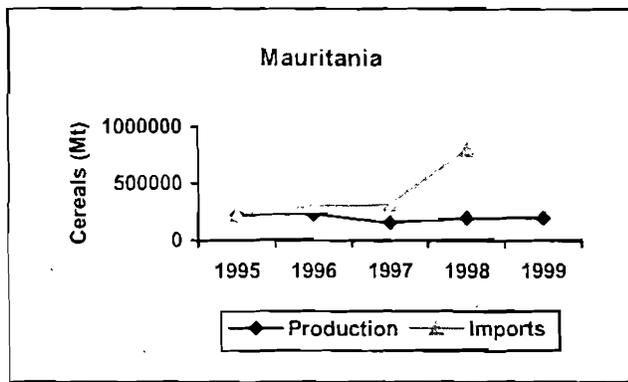
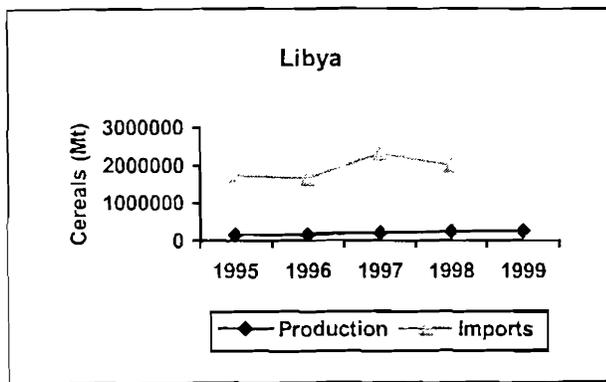
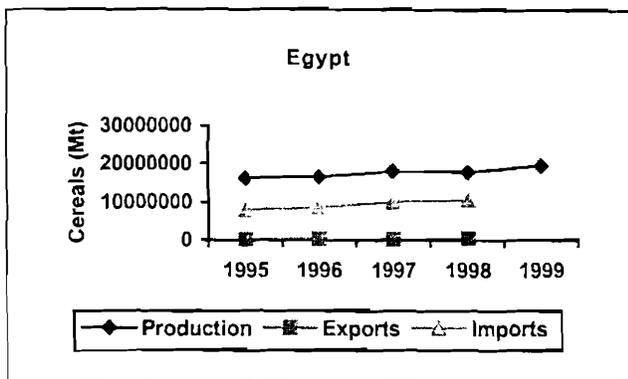
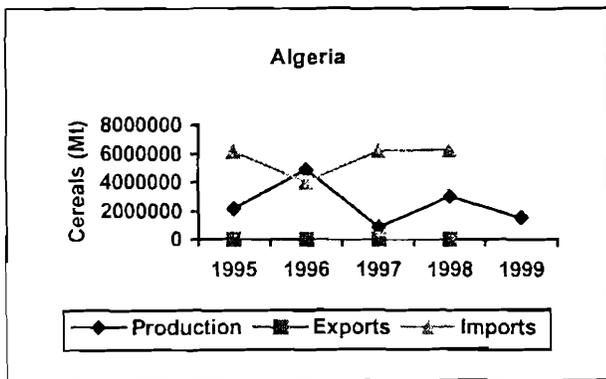


Figure 26: Cereal Trends by country (1995-1999)



3.2 Manufacturing Industries

Overview

Throughout the 20th Century, historical evidence as well as traditional economic wisdom tended to identify industrialisation in general and manufacturing in particular as the “transforming process” in economic development. However, as the global economy entered the new Century, this traditional proposition has become more uncertain as the industrial age has steadily and structurally given way to information as the “transforming factor” in the current information age.

It is, indeed, in this new context that an analysis of the structural patterns of the manufacturing sector in developing countries such as those of the North African sub-region must be viewed especially in the long-term perspective. But, in taking this new perspective some important questions need to be addressed. Some of the most fundamental aspects that have to be reflected upon include the following:

- Can developing countries manage to leapfrog from the traditional economic structures into the information age economic relationships without having consolidated the industrial production base?
- Will the jump into the information age offer enough opportunities, as the industrial age did, for the employment of the increasing labour force in developing countries such as the North African countries?
- How do those countries that have not had a chance or adequate time to consolidate their industrial or manufacturing base deal with the issue of competitiveness in the new information age for?
- In view of the above, what type of structural pattern of the manufacturing sector should be aimed at?

Manufacturing Patterns

Although a more thorough analysis is needed to determine how the manufacturing sector had evolved in the North African countries by the year 2000, available indicators show the following general trends:

- There have been limited changes, especially in the two decades of the 1980s and 1990s, in the structure of manufacturing in most of the countries of the sub-region. It is apparent that the focus of economic reforms on structural economic programmes that emphasised getting the macro-economic framework right did not leave enough room for policy efforts on sectors like manufacturing.

- The composition of industrial products in the countries of the sub-region has not significantly changed and remains dominated by light industries such as food processing industries, clothing and footwear, etc...
- The majority of the manufacture products of the countries of the sub-region are mainly for the internal domestic market since external market penetration has been slow and very limited in scope.
- The only significant and positive structural shift that has emerged and continues to be consolidated in the sub-region's manufacturing sector relates to the increased participation of the private sector in and the concomitant withdrawal of public enterprises from the overall activities of manufacturing industries.

The Algerian non-oil industrial sector is perhaps the most dramatic illustration of the atypical transformation of the manufacturing sector in the changing global economic circumstances. By the year 2000, the manufacturing sector was still deeply entangled in a number of structural problems including a decline in sector growth rates, low and declining productivity and an unsettled process of transfer of ownership of enterprises from the public to the private sector. The output of the non-oil industrial sector as a whole is estimated to have declined by 1.5 percent in 1999. There are fears that the engineering core of manufacturing that traditionally accounted for the growth and exports of this sector as a whole is disappearing in favour of food industries. In this respect it should be stressed that one of the major issues in restructuring the Algerian non-oil industrial sector is the privatisation process, which, despite various efforts, has, yet to bear results. It has thus become apparent to policy makers in Algeria that the situation of the non-oil industrial sector needs a totally new strategy to address issues such as which of the industrial activities to retain in the public arena, re-deploy or privatise.

The countries that have experienced some positive structural changes in their manufacturing sector include Egypt, Morocco and Tunisia. In these countries, industrial production has steadily grown and the participation of the private sector in industrial production activities has deepened. In Egypt the manufacturing sector has shown great signs of promise to the extent that there is an air of optimism in Egypt that industrial products will, in a few years to come, makeup, in terms of foreign exchange earnings, for the decline in hard currency earnings from the oil sector and the slow increase of traditional non-oil exports such as cotton and textiles.

In Libya, Mauritania and Sudan the manufacturing sector is relatively small. For example, in Mauritania it represents only around 12 percent of GDP and employs less than 10 percent of the active population. In these countries there are a number of factors that have, over the years, critically affected the hope to transform the manufacturing sector. Libya and Sudan were affected by the international embargo that led to the deterioration in manufacturing enterprises due to absence of new investments and an acute lack of spare parts. Also in these countries, there is only a small absolute and effective market for industrial products. This limits both the growth of the sector and its pattern.

3.3 The Energy Sector

The North African sub-region has some of the most important oil and gas producers in Africa. Algeria and Libya are major oil producers and members of OPEC. Egypt and Tunisia have also been producing and exporting oil for some time. Sudan joined the group of oil exporters and Morocco, which recently announced the discovery of oil reserves, can now also be added to the list as a potential oil producer. It is thus clear that, structurally, hydrocarbons and gas are and will continue to be a very important sector in the North African sub-region as a whole. Due to the very large role that oil and gas plays in the economies of all oil-producing countries in terms of revenues, growth and overall structure, a survey of recent developments in the oil and gas sector in the North African countries by the year 2000 is briefly sketched below.

The importance of the oil sector in the Algerian economy cannot be overstated. In 1999, the sector saw an appreciable recovery as the price of crude started to recover from the 1998 slump. It is thus estimated that oil exports in 1999 grew by 8 percent relative to 1998. Other important developments in the Algerian oil and gas sector during the 1999-2000 period include (i) the discovery of new oil deposits thus increasing the known reserves to 72 million tonnes of petrol and 28 cubic metres of natural gas; (ii) the start of production, in 1999, of a number of projects, which have resulted in an increase in the processing capacity of 60,000 barrels/day. However, the transformation of oil into petrochemicals has remained weak compared to its potential and it is estimated by the CNES to have registered a decline of -7 percent in 1999.

During 1999, Egypt tried to adjust to the decline in world oil prices by adopting a flexible policy aimed at balancing the goals of exporting crude oil and oil products as well as satisfying the domestic oil market. The overall results were: (i) a decrease of 3.6 percent in production of crude oil, (ii) a decrease of 1.2 percent in condensates and (iii) a decrease of 0.5 percent in liquefied gas. However, natural gas production increased by 4.4 percent. Total production of the oil and gas sector contracted by 1.8 percent and exports of oil, natural gas and derivatives declined by as much as 45.7 percent given the escalation in domestic consumption of these products. While oil production might not keep pace with the expansion of economic activities in Egypt, there is much hope that gas will increase in significance to replace crude oil as an export item. By end of 1999 natural gas production in Egypt had risen from 1.6 billion cubic feet/day (Bcf/d) to 2.3 Bcf/d and is expected to grow further to reach 4.0Bcf/d by 2003.

Libya has a lot of oil and gas reserves. The presently operated 12 oil fields have reserves estimated at 1 billion barrels or more and there are 2 other untapped fields that could have reserves of equal magnitude. The proven gas reserves are estimated to be 46.4 trillion cubic feet (Tcf). In April 1999, a new petroleum law was announced. In addition, at the end of the year, Libya introduced a new pricing policy involving a 20-30 cents increase on the 1998-price of a barrel of oil. Overall, oil production in Libya is estimated to have averaged 1.33million b/d in 1999 and 1.37 million b/d in 2000. With the lifting of the UN sanctions the oil sector has witnessed a surge of external interest of investors in the sector and the Libyan government through the National Oil Company (NOC), has responded positively by, inter alia, opening up the sector to international bidders under exploration and production sharing agreements. The main focus of gas development was the US\$5.5 billion West Libya Gas Project (WLGP) scheduled to be completed in 2003. At its completion, this project will produce about 10 billion cubic metres/year of natural gas over a 20-year period and 80 percent of this will be for export to Europe via the Melitah-Sicily pipeline.

On 20 August 2000, the King of Morocco announced the discovery of oil and gas in the Talisint region east of the Kingdom. Quantitative details and figures of the oil and gas find are not yet very firm. The Minister in charge of Energy and Mines announced that the first oil wells of Sidi Belkacem I in Talisint have reserves of 100 million barrels of oil equivalent. But, the newly appointed head of the '*Office Nationale de Recherche et d'Exploration Pétrolières (ONAREP)*' gave a more cautious estimate noting that

the three explored blocks in Talsinnt namely Bekacem I, II and III could contain potential reserves of 50 to 100 million barrels of oil equivalent.

Overall, it is expected that with continued exploration, oil reserves in the whole Talsinnt region could attain a level of 1.5 to 2 billion barrels of oil equivalent. Other non-official estimates put the potential reserves at a high 9 billion barrels of oil and 200 billion cubic metres of natural gas. Whatever the level of reserves there might be, Lone Star Energy Corporation that made the first oil find is set to continue prospecting in three more zones (Talsinnt I, Talsinnt II and Talsinnt III covering a total area of 6,000 square kilometres in the province of Figuig. The company has also secured four other licences to explore four other areas of Loukkous, Labrouj, Essaouria and offshore Safi-Rabat all together covering an area of 37 million square kilometres.

The importance of the Moroccan oil find is expected to bring about a number of positive results and a number of structural parameters of the Moroccan economy are supposed to improve significantly. Among these, are the following:

- Morocco which presently imports some 50 million barrels of oil per year will become self-sufficient in oil for at least a minimum of 22 years even if oil consumption were to grow by 5 to 7 percent annually.
- Investment in the energy (and possibly in other related sectors) is set to increase drastically as is already evidenced by the increase in investments from US\$30 million to US\$150 million that only one company, Lone Star Energy Corporation, expects to make.
- Given the importance of energy costs in the overall structure of production costs for Moroccan and other firms operating in Morocco cheaper energy from local oil production will lead to improved productivity of these firms and increased competitiveness of the Moroccan economy as a whole.
- The revenues from the discovered oil will boost public revenues and consequently alleviate the foreign debt burden.
- The Moroccan economy could find some form of 'shock absorber' effect in becoming an oil producer such that the economy would not continue to face erratic growth patterns as a result of unpredictable climatic conditions.

In 1999 Sudan became an oil exporter for the first time. In July 1999, the 1600-kilometer pipeline from Muglad that is surrounded by the oil fields in the South of Sudan (Heglig, Talih, Unity, Sharaf, Tabaldi and Abu Gabra fields) to the Bashayir export terminal south of Port Sudan started filling with oil. By 31 August 1999, the first cargo of 6000,000 barrels of Sudanese 'Nile Blend' was loaded for export. Progress was also made in the downstream oil activity of oil refining. In the second half of 1999 the Concorp refinery with a capacity of 10,000 b/d was commissioned while work started on upgrading the Port Sudan refinery to raise output from 25,000 b/d to 70,000 b/d.

The production of crude oil in Tunisia declined in 1999 from the peak level of 110,000 barrels/day in 1998 to around 82 barrels/day. It is against this background that Tunisia passed a new hydrocarbons law offering a range of incentives to oil-exploration and oil-production companies and allowing for new formulas for oil and gas pricing.

Oil Prices

For example, world oil price fluctuations are at the root of the structural vulnerability of oil exporting countries to the changes in the world economy. No doubt, OPEC has always tried to ensure that this problem can be controlled through production quotas. At their Hague meeting in April 1999, OPEC countries adopted an oil production cut of 1.29 million barrels/day in order to force oil prices up. This policy led to the picking up of oil prices starting in the second half of 1999. However, after the skyrocketing of the oil prices during the first half of 2000, OPEC tried to stabilise them by adopting, at the March and June 2000 Ministerial meetings in Vienna, production agreements that involved a 1.452 million barrels/day and 708,000 barrels/day increase in production respectively. The meeting in September 2000 also saw an increase in production. The end result of the sustained OPEC production policies and efforts to adhere to these policies so as to keep oil prices at sustainable levels has been that oil prices have remained high since the middle of 1999 up to the through to the end of 2000.

Electricity

With most of the countries of the sub-region producing oil and without significant internal river flows for hydro-poung, it is only natural that electricity generation is mainly thermal as the electricity profiles outlined below for some of the countries shows.

In Egypt, 84 percent of the county's electricity is from thermal turbines while the rest (16 percent) is from hydro turbines. The oil-fired plants have been converted to natural gas and more electricity

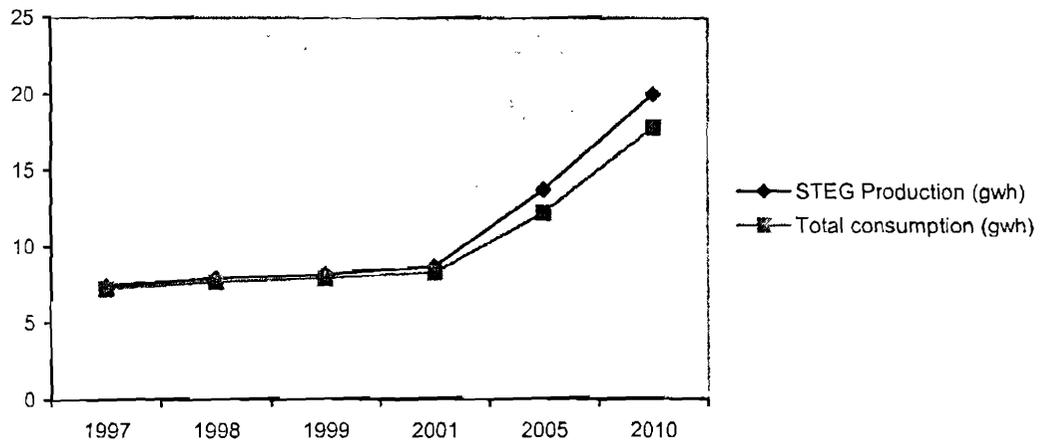
is envisaged to be from this source as evidenced by the Kureimat plant that will add a capacity of 1.2 GW to gas-generated electricity. It is also an emerging policy trend to let most of the investments in electricity generation to come from the private sector. Thus the Egyptian Electricity Authority is encouraging build-own-operate-transfer (BOOT) schemes in the sector. Another structural significant event in 1999 was Egypt's activation of the link to Libya's electric grid.

Libya's electric power production capacity is estimated at about 4.5 gigawatts and is generated mostly from oil-fired plants some of which are now being converted to gas. The UN sanctions would seem to have had an observable negative effect on power generation as the country experienced frequent power cuts during the period of the duration of the sanctions. A lot of investments are envisaged in power generation and government estimates indicate that Libya will require as much as US\$6 billion in investment funds for the power sector alone between 2001-2005.

Morocco's production of electricity is from mainly imported coal (at Mohammedia and Jorf Lasfar plants). Current demand for electricity is growing by about 7 percent annually but this is likely to accelerate further as plans for rural electrification are implemented (presently 15 percent of rural population has access to electricity). Part of the supply to satisfy such growing demand will come from a new 350-400 MW combined-cycle power plant to be fired by natural gas from the Maghreb-Europe pipeline. However, the discovery of oil in Morocco might change this structural profile of electricity generation in the country.

Given the growth in the Tunisian economy, demand for electricity is increasing rapidly at an estimated 7 percent annually. Recent figures from the census indicate that home consumption has also risen sharply since the number of households with access to electricity has, in a 5-year period, increased by nearly 10 percentage points from 85.9 percent in 1994 to 94.6 percent in 1999. Such growth in demand will as of necessity require the construction of a series of new plants. The overall trends and projections in electricity production and consumption in Tunisia are illustrated in Figure 27.

Figure 27 : Trends and projections of electricity production and consumption (Tunisia) 1997-2010



3.4 Non-oil Mining

Non-oil mining is particularly important in Morocco and Tunisia particularly with respect to phosphates. In the other five countries the non-oil mining sector is mainly limited to quarrying and in many cases even these activities have been in decline. For example, in Algeria, mining and quarrying activities declined by -7 percent in 1999. This was mainly due to the obsolescence of machinery, low investments and difficulties in finding the resources required to put the sector back on a growth path.

But even in the countries where non-oil mining has, in the past, been important there are signs that its importance is declining structurally. For example, the mining sector in Morocco has structurally become smaller in terms of its contribution to GDP accounting for about only 2 percent of GDP. However, the sector remains of particular importance in terms of exports earnings. Within the sector phosphates are the most important, accounting for over 90 percent of mining output. In 1999 Morocco's production of the mining sector declined by 2.9 percent from the 1998-production level of 24.0 million tons to a total production of 23.3 million tons. Given this trend, production of natural and chemical fertilisers declined. However, the production of phosphoric acid managed to increase by 4.5 percent. The output of all other mineral products (zinc, barytine, lead, etc...) declined in 1999.

Tunisia is perhaps the only country in the sub-region that has maintained a relatively upward trend in the growth of the non-oil mining sector. Tunisian production of lime phosphate in 1999 was over 6 million tons representing a growth rate of over 1.5 percent relative to 1998. All other mining activities and phosphate by-products (zinc, lead, phosphoric acid etc...) also registered impressive growth rates.

3.5 The Water Sector

The international concern and urgency for a water agenda that started in 1977 in Mar del Plata was recently put again to the world as a whole at the Second World Forum on Water held in March 2000 in The Hague, Netherlands. Observers are now aware that the world must move from the 'Green revolution' of the 20th Century to a 'Blue Revolution' of the 21st Century. In the *Ministerial*

Declaration of The Hague on Water Security in the 21st Century, adopted on 22 March 2000 the following challenges were identified: achieving water security; sharing water resources; managing water risks (floods, droughts, pollution); valuing water; and governing water wisely. North African countries are among those most affected by these challenges.

Due to the specific geographical and environmental characteristics of the North African sub-region, the issues of water and the environment are taking on an increasing degree of importance. This is as it should be because of a number of critical considerations. Firstly, for the world as a whole, the shocking reality is that there is no more water today when the population of the world is 6 billion than there was 2000 years ago when the population of the world was a mere 180 million!

Of course, it should be kept in mind that while water is widely distributed around the globe such that over 70 percent of the earth's surface is covered with water, 97 percent of all water is in the world's oceans as unusable salt water. The remaining 3 percent which is freshwater, as much as 87 percent is locked in ice caps, glaciers, the atmosphere, soil, or deep aquifers leaving only about 13 percent (0.4 percent of all water) as usable. And of this, less than 1 percent is in the Middle East and North Africa.

Thus, the Middle East and North Africa is one of the regions on the planet that faces an acute scarcity of surface water such that, without exaggeration, the survival of future generations in this region depends on what the present generation does with regard to solving the question of water availability and sustainability. Table 3 gives estimates of the renewable fresh water situation in per capita terms in 1995 and 2025 for some of the countries of the North African sub-region. It should be noted, in interpreting the figures in the table, that a country is generally classified as having serious water shortage if it has less than the UN minimum of fresh water resources of 1700 cubic metres per year per person.

In addition the sub-region has a water dependence structure that lies at both extremes of dependence. On one extreme there are three countries (Mauritania, Egypt and Sudan) with a high dependence on surface water originating from outside the country's own borders. On the other extreme, there are three countries (Libya, Morocco and Algeria) with almost no surface water originating from outside the country's own borders.

As has been since the beginning of Egyptian civilization, the waters of the Nile are a unique and, at the same time, a critical resource in the country's development and survival. Despite the fact that Egypt is located downstream of the Nile after it passes through a line of countries, the Nile still provides 96 percent of Egypt's water supply. This share of the waters of the Nile is governed by the 1959 agreement with Sudan, which allocated 55.5 billion cubic metres for Egypt and 18.5 billion cubic metres for Sudan. This agreement was based on the 84 billion cubic metres of average annual flow at Aswan during the 1900-1955 period and an estimated 10 billion cubic metres of annual losses due to evaporation and seepage at Aswan Lake.

To increase the amount of water available annually to both Egypt and Sudan, three projects were initiated namely the Jonglie canal (7 billion cubic metres); Bahr El Gazal project (7 billion cubic metres); and Machar swamps project (4 billion cubic metres). However, these projects have met with a number of problems and in some cases, such as the Jonglie canal, work has been discontinued. In addition, environmental factors and long spells of drought (e.g. the 1980-1987 African drought) have, among other factors, exposed the potential threat of a reduction in water availability flowing to Egypt along the Nile and have thereby exposed Egypt's water vulnerability despite the multi-year regulatory capacity of the High Aswan Dam with a live capacity of 90 cubic kilometres. As a result, all the countries of the Nile Basin (Egypt, Sudan, Ethiopia, Kenya, Rwanda, Burundi, Uganda, Tanzania, and Congo) are showing increasing interest in reviewing the situation of the Nile water resources. Structurally, the largest demand for water in Egypt is in agriculture, which accounts for 84.4 percent of all water use in Egypt (industry takes up 10.6 percent and all other uses account for 5.6 percent). In this respect Egypt is paying particular attention to improving water efficiency in the old irrigated lands while, at the same time, rationalizing the horizontal expansion plan, which includes projects such as El-Salam Canal with a water requirement of 4.45 billion cubic metres per year and the Toshka project requiring 3.5 billion cubic metres of water per year.

Libya has very limited surface water resources. Of the total estimated 4.9 billion cubic metres of water resources a mere 2.3 percent is surface water and 2.1 percent is desalinated and recycled water. Thus a large proportion of water in Libya is underground. Taking into account that Libya's annual water requirement is estimated at around 2.6 billion cubic metres (435 million cubic metres for domestic consumption; 2164 million cubic metres for irrigated agriculture and 60 million cubic metres for industry) the

importance of underground water becomes more than evident. It is against this background that the efforts of the Libyan government to build the massive US\$25 billion Great Man-Made River that started in 1984 must be appreciated. The project which has been divided into five phases will enable Libya satisfy all its irrigation, consumption and industrial needs in water and also enable the country to replenish existing wells that are running dry. The first part of the five phases can allow a flow of 2 million cubic metres per day (and this capacity could be expanded when needed) to the agricultural lands between Benghazi and Sirte. The second phase would deliver 1 million cubic metres of water per day to the Western coastal region and enable the development of the Jeffara region

Mauritania depends largely on the waters of River Senegal and, as a consequence, the country has, in the sub-region, the highest rate of dependence on external surface water (i.e. surface water originating from outside the country's own borders) of 96.5 percent. The underground aquifers producing continuous water are limited to the coastal basin as well as in the recent dunes of Aouker and Assaba. In the rest of the country, there are seasonal aquifers, which produce mineral waters. In general, there are four water aquifer zones: The coastal Trarza basin on the West, the North-South central zone of the Mauritanides, the massive Southeast basin of Taoudeni and the Northern Inchiri and Tiris Zemmour zone. Paradoxically, given Mauritania's low population and limited irrigation (estimated at less than 500 square kilometres), the overall per capita water availability is one of the highest in the sub-region.

Morocco's water resources are relatively important especially compared to the other countries of UMA. However, the country has historically been affected by cycles of extreme drought. In about a century between 1905 when climatic data were first recorded and 2000, Morocco has had 40 years of drought, which represents close to 40 percent of structural drought. Thus, the country has had to make important investments in establishing a water infrastructure to mitigate the effects of drought. There are 92 dams with a capacity of nearly 14 billion cubic metres estimated to represent about 70 percent of the potential exploitable water sources of about 20 billion cubic metres annually. However, comparing the trends in water resources availability and population growth in the future, the water situation in Morocco shows an important deterioration. It is estimated that water availability per person per year declined from 1200 cubic metres in 1990 to only 950 cubic metres in 2000 and will decline further to only 411 cubic

metres per person per year by the year 2020. Other reports on water resources in Morocco have warned that such a decline in water resources availability could result in a 30-percent drop in water available per hectare of cultivated land. These trends have, no doubt, to be urgently addressed in the context of the upgrading of water management techniques as well as in the long-term perspective of infrastructural investments.

Of all the seven countries in the North African sub-region, Sudan is the most water-endowed with a variety of water sources covering:

- i. Rainfall, which, though sometimes unreliable and variable across the Sudanese land mass, contributes about 1094 billion cubic metres of water annually of which 3 per cent is actual yield to inland drainage systems and tributaries.
- ii. The Nile Basin System of which Sudan has a share of 18.5 billion cubic metres at the Aswan dam as per the 1959 agreement with Egypt. The whole Nile Basin System has the potential of pouring as much as an average of 154.3 billion cubic metres of water annually into the Sudan (50.7 billion cubic metres from Blue Nile at Eddeim; 30.9 billion cubic metres from White Nile; 29.0 billion cubic metres from Bahr El Jebel at Mongalla; 14.0 billion cubic metres from Bahr ElGazal; 13.7 billion cubic metres from Sobat at Malakal; 12.0 billion cubic metres from Atbara at Girba; 3.0 billion cubic metres from Dinder and 1.0 billion cubic metres from Rahad).
- iii. The Non-Nile System involving the Gash, Baraka and Jebel Marra streams with a combined annual water flow of 2.3 billion cubic metres;
- iv. Underground water considered as the most important water resource in the country as it provides 80 percent of domestic water supply and a significant part of agricultural water supply in the regions of Darfur, Kordofan, Kassala and the Northern areas. The volume of underground water in the Sudan is estimated to be at 564 billion cubic metres with an annual recharge of 1.563 billion cubic metres and an annual abstraction of only 227 million cubic metres.

Tunisia's water resources are unevenly distributed with the North having a large share of surface water while the South has most of the underground water. The country has made important investments in dam building which, by 1999, enabled the country to mobilise 79 percent of exploitable water sources. However, the water resources programme has yet to achieve about 30 percent of its set objectives. Among the important objectives completed during the period under review, was the 6.8-kilometre tunnel

carrying water from Barbera in the North West to improve drinking water in the North and irrigate about 3,000 ha of land.

Table 3 : Renewable water resources in the Near East Region

COUNTRY	ANNUAL AVERAGE PRECIPITATION		ANNUAL RENEWABLE WATER RESOURCES					Dependency Ratio %
	mm	million m ³	internal million m ³	m ³ per inhabitant '95	total natural million m ³	total actual million m ³	m ³ per inhabitant '95	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ALGERIA	68	162 900	13 900	498	14 300	14 300	512	2,8
EGYPT	18	18 100	1 800	29	86 800	58 300	926	96,9
LIBYA	26	46 100	600	111	600	600	111	0,0
MAURITANIA	99	101 900	400	176	11 400	11 400	5 013	96,5
MOROCCO	336	150 000	30 000	1 110	30 000	30 000	1 110	0,0
SUDAN	436	1 092 600	35 000	1 246	154 000	88 500	3 150	77,3
TUNISIA	207	33 900	3 520	396	4 120	4 120	463	14,6

Source: FAO

Figures 28-30 : Water Resources in North Africa

Figure 28 : Rainfall annual average in mm

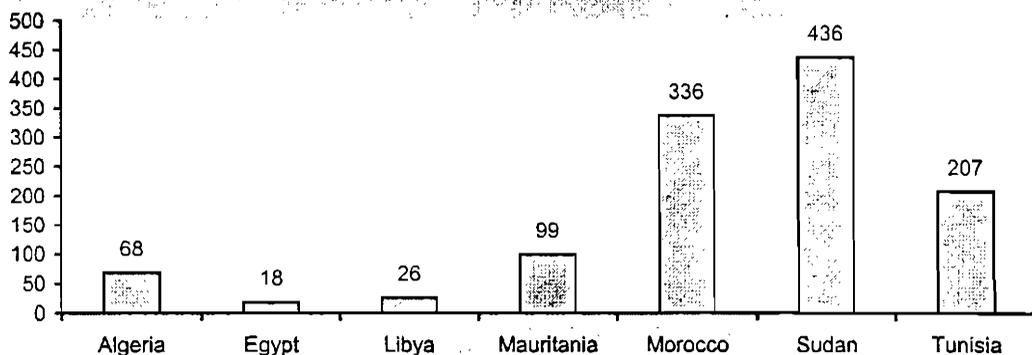


Figure 29 : Total water availability per inhabitant

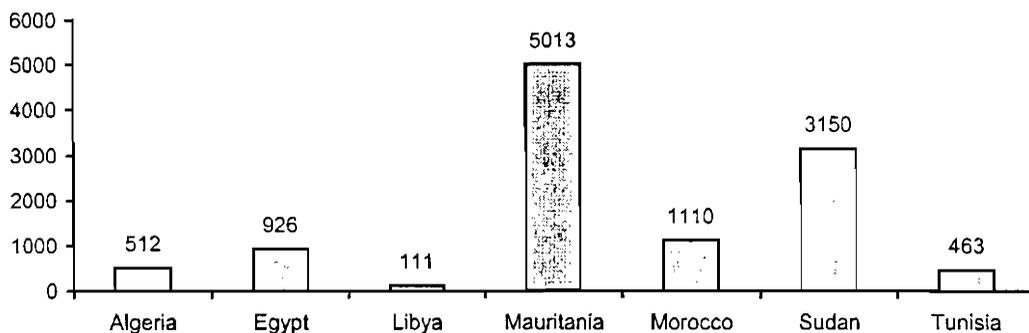
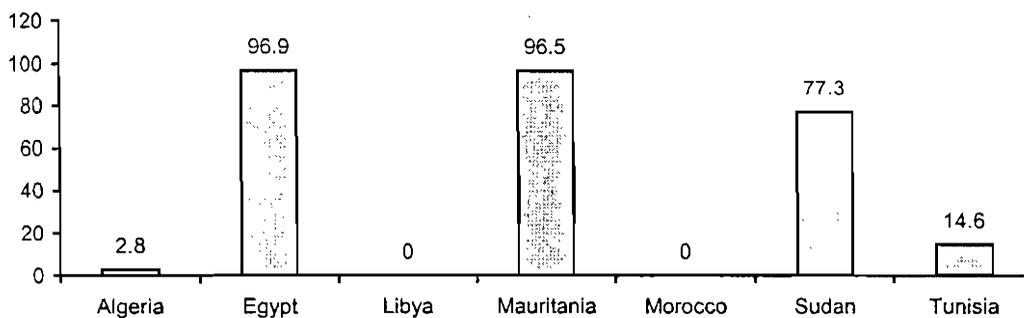


Figure 30 : Dependency on water from outside borders of countries (%)



3.6 The Environment

In addition to the scarcity of rain and water, the North African sub-region is basically arid with little forest cover such that rapid population growth, urbanisation and modernisation, including in particular oil and gas production, have all combined to impose a number of dangerous stresses on the environment. In the sub-region as a whole, natural resources and agricultural land are being lost to both urbanisation and desertification. Coastal areas are affected by oil pollution and improper disposal of solid and chemical wastes. Air pollution has become a serious hazard in some cities in the sub-region involving above average concentrations of total suspended particulate matter from industrial and transport emissions and desert sands. As an example, in Cairo, suspended particulate matter is 5-10 times the WHO average guideline levels; sulphur dioxide is four times higher, smoke and lead are three times higher and nitrogen oxides are two times higher.

Desertification is a major environmental problem in the sub-region such that as much as over 30 percent of cropped, range and forestlands are at risk. Although the desert landscape in the sub-region is part of the natural phenomenon, there are indications that it has been exacerbated by human activities. For example, encroachment on forest lands for agriculture in a number of countries of the sub-region has increased soil erosion and poor drainage systems coupled with poor quality of irrigation water is causing an increasing problem of salinisation in some countries.

However, it should be pointed out that there are many signs that the countries of the sub-region are becoming increasingly aware of the attendant dangers of a steadily deteriorating natural environment in the whole of North Africa. There are, indeed, a number of action programmes in the various countries designed specifically to face up to this challenge. It is also important to underscore the emerging role that non-governmental organisations (NGOs) are playing. In countries such as Egypt, Morocco and Tunisia, NGOs are proactive in the field of environmental protection. In Libya, the government is encouraging all efforts to ensure better environmental management. As an example of this, Libya is working on its grazing grounds so as to control desertification, develop water resources, and assist in animal husbandry. An estimated 2.5 million hectares of natural grazing fields have been created in Libya and these will produce one of the largest sources of parcelled fodder in the whole sub-region.

But it should be emphasised that isolated and sub-regionally uncoordinated national efforts are not sufficient in dealing with the environmental problems that constitute a survival threat to the whole sub-region. A more integrated approach for collective actions to tackling the problems is required as many dimensions of the environmental issues cut across national borders. In this regard attention should be paid to the important analytical work that has been undertaken, with the collaboration of the Moroccan Ministry of High Education, on the question of the environment in North Africa²

The question that must be dealt with is that of sustainability of the environment. The countries of the sub-region are acutely aware of this issue and many of them have taken and continue to take important steps to deal with its structural underpinnings with the assistance of international organisations such as UNDP. However there is still an urgent need to focus the attention of the population and civil society to the sustainability of their environment. Thus, more incentive structures need to be put in place to achieve this grass-root approach in the shortest possible time.

3.7 Transports and Communication

Transport

A brief survey of the transport infrastructure in the subregion shows a strong and diversified base. As an example, Algeria has an important and relatively modern transport infrastructure. In the sub-region as a whole it has the largest road network and the longest pipeline infrastructure. Its merchant marine fleet is also only next to that of Egypt.

Also, Egypt made in the 1990s tremendous progress in the transport sector and it is during this period that the transport sector saw the inauguration of what has been called, by Egyptian officials, “the great project of the Century” in the form of the Cairo Underground Metro. Structurally, the transport sector in Egypt plays both a service role and a production role as a service export and is consequently classified under the production service sectors, which also include trade, finance and tourism. The transport sector includes the following areas and/or projects underway:

- A railway system estimated to be carrying about 4 million passengers per day;
- An underground metro in Cairo and Alexandria;

² See Abdelhadi Lahlou, “*Quel environnement pour l’Afrique du Nord*”; Editions Dar Al Qalam.

- A roads and bridges network estimated at over 40000 kilometres;
- Maritime transport which is an important component of value added as a major service export at the Suez Canal;
- Air transport.

The Suez Canal, which has been in operation since 1869, is one of the most important income-generating activities of the transport sector in Egypt. The cargo traffic through the canal has stagnated in recent years and stood at a net tonnage of 386.7 million tons in 1999 compared to 380 million tons in 1998. As a result, the income generated by the Suez Canal has also stagnated at around 6.5 billion Egyptian Pounds annually.

Figure 31 : Railways (Km)

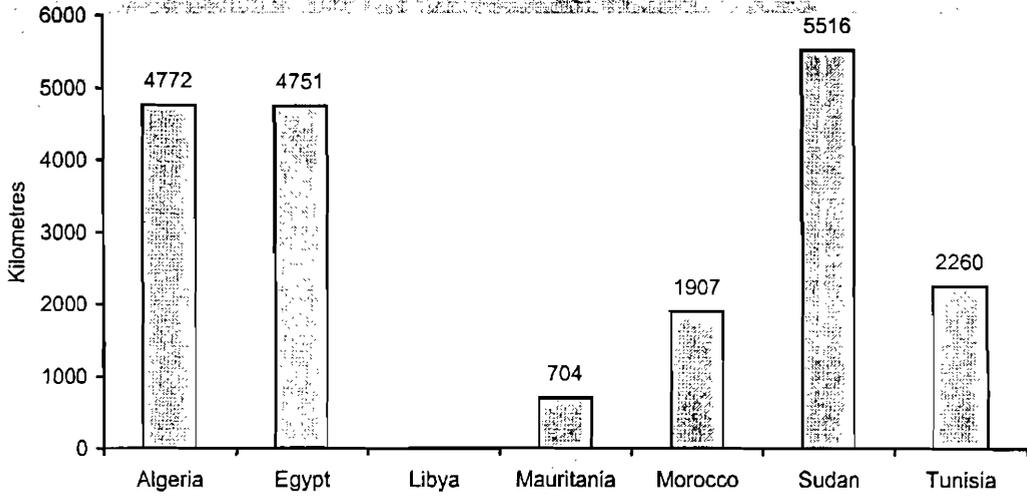


Figure 32 : Paved and unpaved roads (1000 Km)

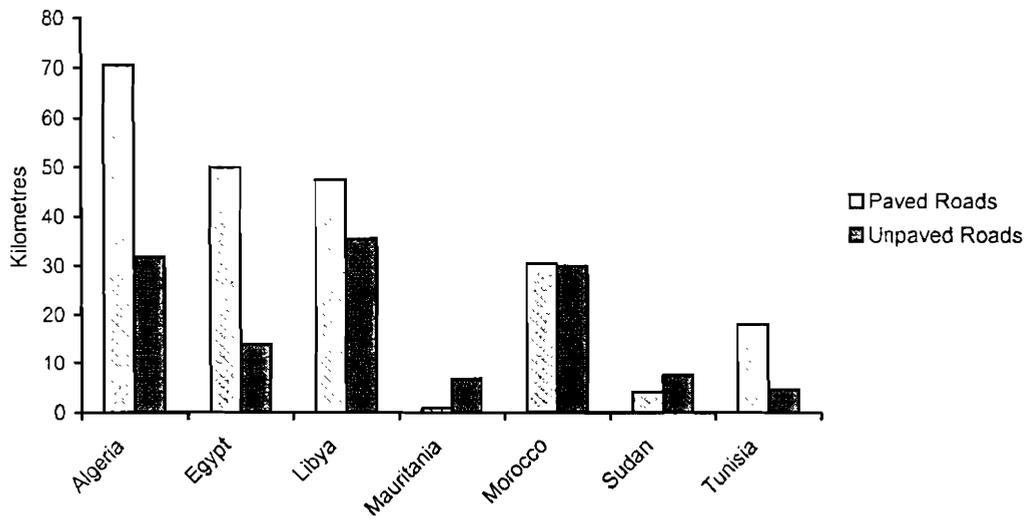
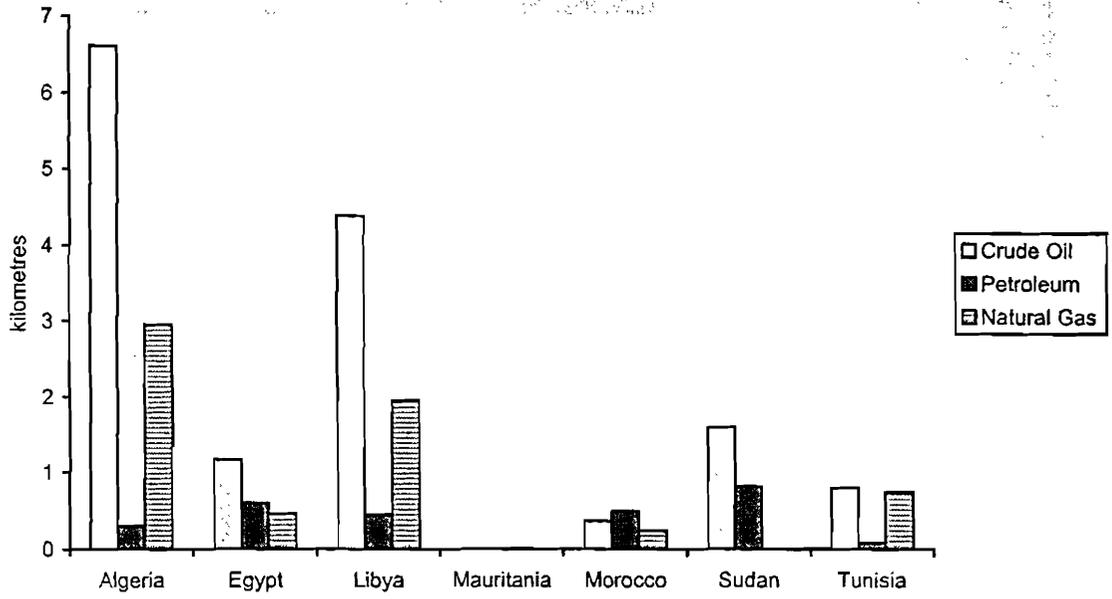


Figure 33 : Pipelines in 1000 kilometres



Communication Infrastructure

The communication infrastructure has become increasingly important in the world as a whole. In view of the role that this sector will have to play in the new world economy particular attention must be paid both to its present structure and its evolution into a modern sector to sustain economic activities such as electronic trade in the 21st Century. A brief survey of the structural characteristics of this sector in the countries of the subregion are briefly sketched below.

Algeria has a good communications system although it is unevenly distributed over the wide expanse of Algerian territory with a high density in the North of the country and a very sparse coverage in the South. Satellite communication includes two connections to Intelsat, Intersputnik and Arabsat. The telephone system operates a domestic satellite with a number of earth stations. It also has international connections through five submarine cables; micro-relays to Italy, France, Spain, Morocco and Tunisia. The country is a participant in Medarabtel.

Egypt has had a large communications system, which, however, remains inadequate to meet present day requirements given the demands of the general population as well as the growth of the economy. The present communication network includes four satellite earth stations (2 Intelsat, Arabsat, and Inmarsat), coaxial submarine cables, tropospheric scatter to Sudan and microwave radio relay to Israel.

Libya's communication network is composed of 14 satellite earth stations, microwave relays (including to Egypt and Tunisia), submarine coaxial cables to France and Italy and tropospheric scatter to Greece. The system is being modernized and cellular phones have been on the increase since 1996.

The communication system in Mauritania is undeveloped. Presently it consists mainly of cable and open wire lines, minor internal microwave radio relay links and radiotelephone stations. Recently, a domestic satellite telecommunication link was established between Nouakchott with regional capitals. Internationally the country is linked via three satellite earth stations (Intelsat and 2 Arabsat).

Morocco's communication sector has made tremendous strides and is presently one of the most dynamic sectors in the economy. Structurally, Morocco's communication sector is composed of open wires, five submarine cables and microwave radio relay links to Algeria, Gibraltar and Spain.

Mobiles Communication and Internet Connectivity

While Sudan has a large communication system it is both barely adequate and poorly maintained. The country has a domestic satellite system with 14 earth stations. In addition there are microwave radio relay, cable, radiotelephone as well as tropospheric scatter links.

The Tunisian communication system is assessed to be of very high standard and has continually been upgraded. The system's domestic trunk facilities consist of open-wire lines, coaxial cables and microwave radio relay links. International links include five submarine cables, microwave radio relay links to Algeria and Libya and satellite hook-ups with Intelsat and Arabsat.

The 'mobile revolution' has seen the telecommunication sector boom in most of the countries of the world and the North African countries have been no exception to this trend. However, the countries that have been on the fastest track in this dynamic area of the telecommunication sector are Egypt, Morocco and Tunisia.

Egypt awarded its first GSM licences for operations in the mobile market in 1998 to two companies namely MobiNil and Misrfone. By 1999, it is estimated that a total of 908,000 subscribers were on cellular phones. However, it should be stressed that the Egyptian mobile phone market is still constrained by a high pricing regime that places mobile subscriber costs as the 25th most expensive in the world at US\$48 monthly subscription plus 100-minutes of calls.

In Morocco, mobile telephones operations started in 1998 with the then government-owned telecommunications company Itissalat-al-Maghrib. In July 1999, a second licence was awarded at a record price of US\$1 billion to Medi Telecom a private consortium composed of foreign and domestic companies (Telefonica InterContinental, Portugal Telecom International Banque Marocain de Commerce Extérieur BMCE and Aiwa). The high price of the second licence reflects the potential market of mobile phones, which, in the next ten years is estimated to reach 15 percent of the population or about 5 million subscribers as compared to only 216,000 subscribers in 2000.

Tunisia's GSM network was launched in March 1998. From the present capacity estimated at about 40,000 subscribers, the mobile operations are expected to surge and the expansion is projected to reach 200,000 by the year 2001.

Figure 34 : Telephones subscribers (000)

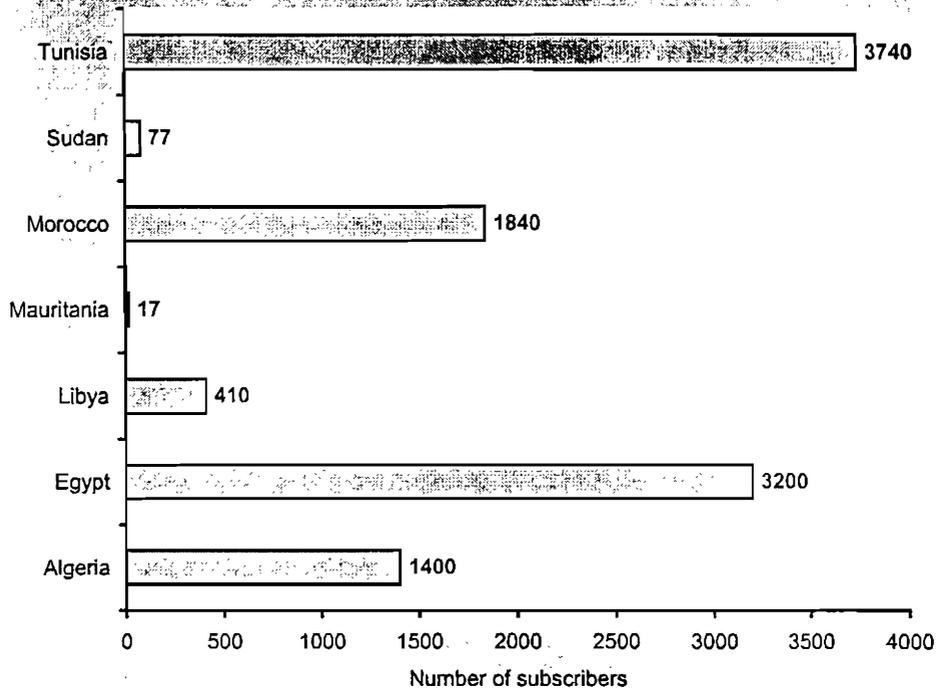
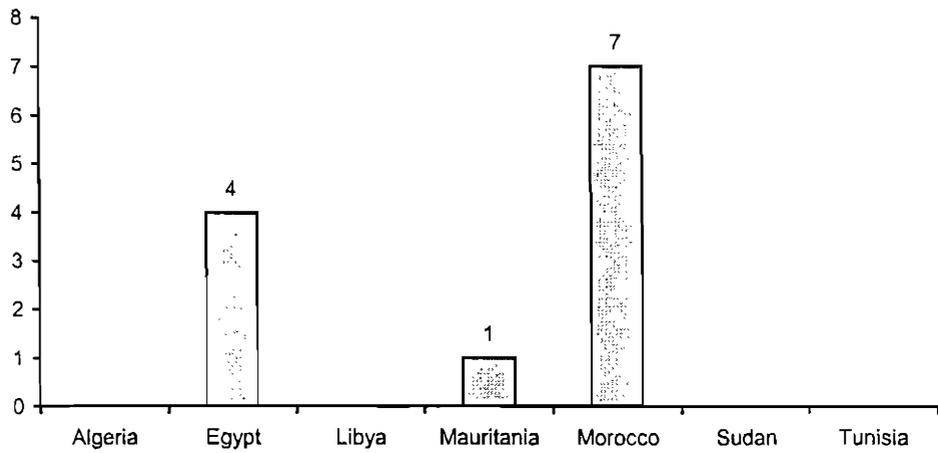


Figure 35 : Internet connectivity per 10.000 inhabitants (1998)



3.8 Tourism

Globally, tourism is an important legacy of the 20th Century. Indeed, at the turn of the new Century, the tourism industry had increased its share in the world's GDP to as much as 11.7 percent and in terms of world trade of goods and services, expenditure on tourism as a service was the highest, accounting for 8.5 percent of total world expenditures followed only by petroleum energy at 7 percent. By comparison, the share of world expenditure on imported cars was 6 percent while electronic appliances and textiles represented 5 percent and 2 percent respectively. Two other facts published by the World Tourism Organisation show the potential importance of the sector even in the new "virtual world" : (i) 625 million people or over 10 percent of the world population went to a foreign country in 1998, (ii) revenue from tourism, in 1998, reached US\$439 billion which is not very far from the total GDP of the whole of Africa!

For the North African sub-region, tourism is particularly important in Egypt, Morocco and Tunisia. Indeed, Tunisia was cited by the World Tourism Organisation as among the countries in the world with the greatest development in tourism (the others being Portugal, Greece, South Africa, Croatia and Ireland). Great potential for tourism also exists in the other countries of the sub-region namely Algeria, Libya, Mauritania and Sudan. Thus as a sub-region, tourism should be seen as one of the important sectors into which the economies of the sub-region could find a new source of growth and, indeed, a source of economic diversification in the new world. While considering this viable option for the North African economies, it should be stressed that the following factors are particularly important to the development of the tourist industry:

- International tourism is sensitive and vulnerable to financial, economic and political instabilities;
- The tourism industry negatively correlates with natural disasters or sustained hard natural phenomenon such as drought;
- The world's baby-boom generation are getting relatively richer, retiring early and are already looking for cultural, exotic and authentic experiences outside their own places of origin;
- Competition in the tourism industry will intensify over time and the early starters in investing in the sector are more likely to swamp the opportunities of late-starters.

Egypt has a diversity of attractions to offer any kind of tourist. After experiencing some setbacks in 1998 mainly as a result of the "Luxor incident" in November 1997, Egypt's tourist industry bounced back in 1999. The rebound brought in a total 4.3 million tourists representing a 25.6 percent increase over 1998. The number of nights similarly increased from 20.2 million to 25.7 million.

Tourism is only a recent activity in Mauritania but it is showing good promise. Attractions in the country include the desert, the 700-kilometre untouched coastline, and the ancient cities of Ouadane, Chinguity, Tichitt and Oualata as well as the archeological sites of Aoudaghost or Koumbi Saleh. The country has also embarked on the promotion of the sector in line with the national tourism policy adopted in 1994. Thus, focus has been put on eco-tourism (for example in the Banc d'Arguin national park which was declared a world natural monument) and on scientific and cultural tourism. The country is also intent on targeting selective tourism to avoid the negative effects of touristic activities. However, while a number of inaccessible areas in Mauritania have been made more accessible, the transport network is still far from adequate to serve as a dynamic component of the tourism infrastructure in Mauritania. Further, international travel to Mauritania is also limited. Hopefully this will change as the tourist industry takes firmer roots. Presently, in addition to the few international flights into the capital, Nouakchott, only the Société mauritanien de services et de tourisme (SOMASERT) operates some charter flights between Paris and Atar with an estimated traffic of 55 flights and 7,800 passengers during 2000.

At present Morocco's tourism sector accounts for about 7.8 percent of GDP and has a significant contribution to both the State budget and the balance of payments account (13.5 percent in 1998). The sector is also estimated to be a major source of employment as it is estimated that at current tourist levels of around 3 million per year, the sector employs over 600000 people directly or indirectly implying a rough estimate of the sector's employment capacity of one job per 5 tourist visitors in a year. Fortunately, Morocco has tremendous potential for the development of the tourism industry to become, inter-alia, a real absorber of the unemployment in the country at large. Besides its cultural, historical and natural sites, the country has the unique geographical advantage of having two shorelines namely on the Atlantic and the Mediterranean giving it an extensive area for the development of beach leisure facilities to attract many more tourists than the present levels.

Figure 36 : Tourism indicators (Egypt)

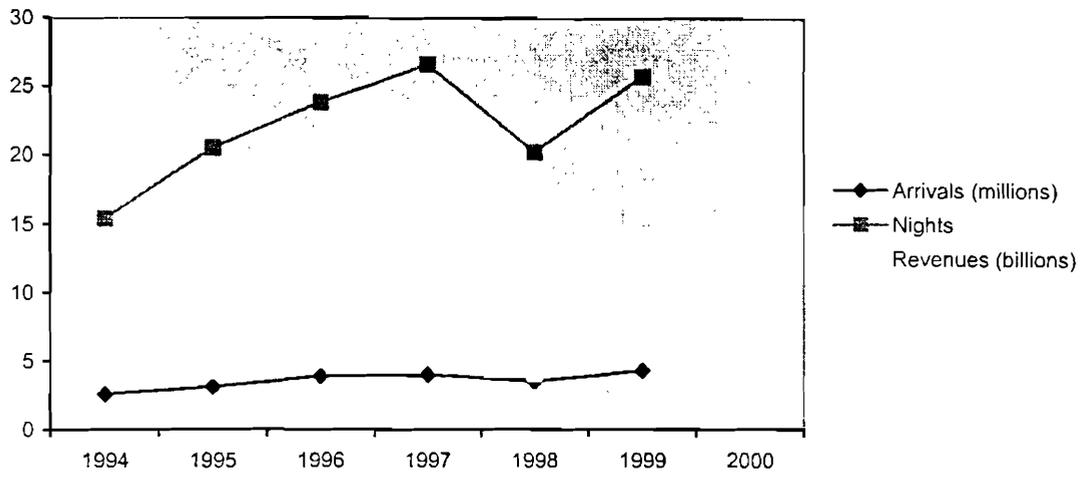


Figure 37 : Tourism indicators (Morocco)

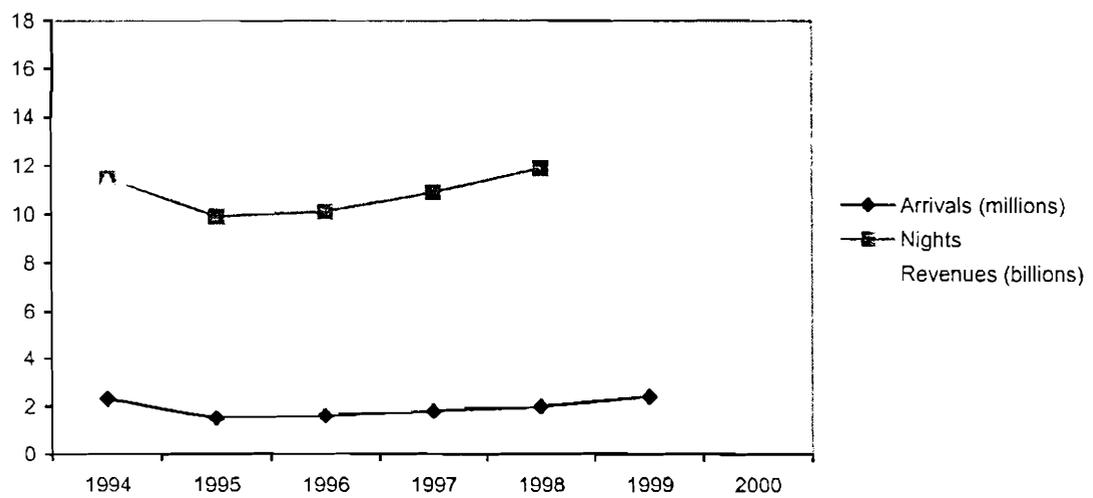
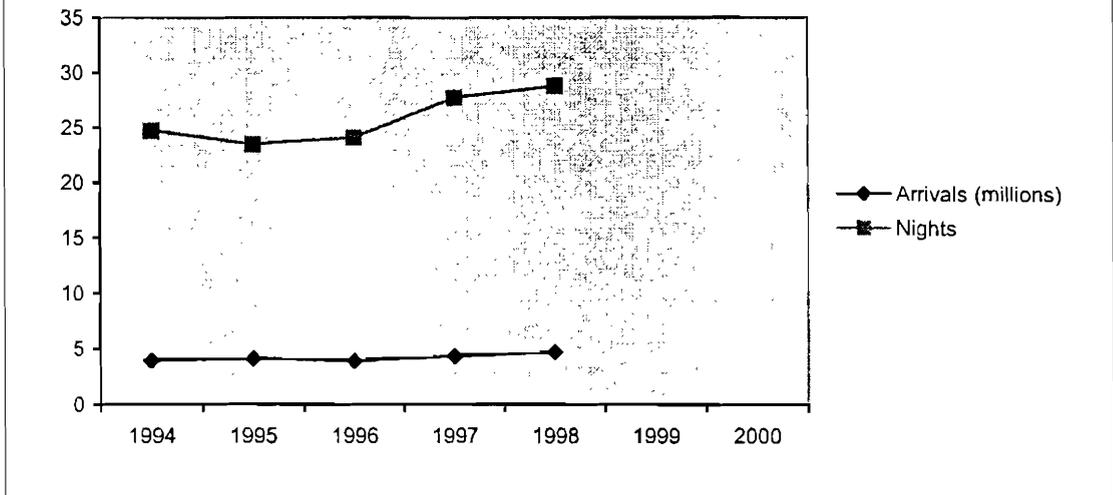


Figure 38 : Tourism indicators (Tunisia)



SECTION 4

SELECTED STRUCTURAL SOCIAL ISSUES

In the spirit of the structural analysis that runs through the present survey, this section deals with the social conditions in the North African subregion at the start of the new millennium. It particularly focuses on the health status and levels of education.

Figures 10 to 12 in Section I show that, compared to the past, North Africans live longer, are more educated, and their children are accessing primary schools at levels never seen before. Besides their real progress, North African societies face new challenges which are the result not only of their own development but also of their increased connection to the global economy.

However, it is important to note that the 1999 assessment of the progress made in implementing the World Social Summit agreements highlighted the fact that, for the last years, the percentage of public resources dedicated to the social sectors (education and health) have not changed in most countries of the sub-region, and when some changes have been observed, these were marginal. The percentage of public resources on social sectors ranged from 2 to 7 per cent for the health sector and from 13 to 23 per cent³ the education sector.

It is important to stress the importance of this trend since achievements in the social sector in North Africa as in most developing countries are mainly explained by the heavy public investment made during the last decades. In contrast, the role of the private sector has been very limited. Therefore, any stagnation of the social budget, in face of a growing demand, would inevitably adversely affect the welfare of the populations in North Africa.

Health

Figure 10 in Section I showed that, on average, North Africans live 65 years which is longer than what the populations of Sub-Saharan

³ United Nations, ECA and UNDP, *Progrès accomplis dans la réalisation des objectifs du secteur social*, ECA/UNDP/WSSD/NA/3, Sub-regional Conference on the Follow-up to the World Social Summit, Marrakech 23-25 March, 1999.

Africa (51), South Asia (61) and East Asia and the Pacific (62) would expect to live. However, North African populations still die at a younger age as compared to Latin America and the Caribbean (70) and the Central and Eastern Europe and Community of Independent States (CEE/CIS) and Baltic States (68) populations.

Also babies have more chances to survive today than they used in 1960 (Figure 39). Although, on average, infant mortality rates prevalent in North Africa (52 per 1000) are lower compared to the rest of Africa (105) and South Asia (78), they are still higher compared to the CEE/CIS and the Baltic States (29), Latin America and the Caribbean (33), and East Asia and the Pacific (40).

Children under 5 years old have also more chances to live than they used before (Figure 40) and more than the children in Sub-Saharan Africa and South Asia. However, the incidence of mortality among these children is still high (70 per 1000) compared to Latin America and the Caribbean (31), CEE/CIS and Baltic States (35) and East Asia and the Pacific (52).

The health sector needs also to address the issue of maternal mortality. As shown by Figure 41, in North Africa, an important percentage of mothers still die for reasons related to childbirth, that could be, in most cases, avoided. Moreover, these rates have been stagnant for the past few years⁴.

Education

Figure 12 in Section I shows that in terms of access to primary education North Africa has made tremendous progress, especially taking into account the population growth. Effectively, during the last decade, the school system reached, on average, 92 per cent of the children, representing a near doubling of the percentage of children enrolled in 1960.

Moreover, data on youth's literacy rate (Figure 42) show that in almost all North African countries, more than 65 per cent of the youth population (women and men between 15 and 24) know how to read and write implying that on average only 35 per cent of the youth, are still illiterate. Indeed, in some countries of the subregion on youth literacy rates are quite high. For example, youth's literacy rates in Libya (95,8), Tunisia (92) and Algeria (87,3) are higher to the world average (85,1) and to the average for developing countries (84,1).

⁴ Idem.

Human Development

However, despite the fast and commendable quantitative progress in education observed in North Africa, the quality of education provided needs also to be assessed and its problems addressed. Effectively, a major challenge of the educational system is that young educated people are facing much higher unemployment rates than any other groups. This failure is essentially due to the inadequacy of the education and training systems with respect to the changing dynamics of the labour market and of the economic structure in the countries of North Africa.

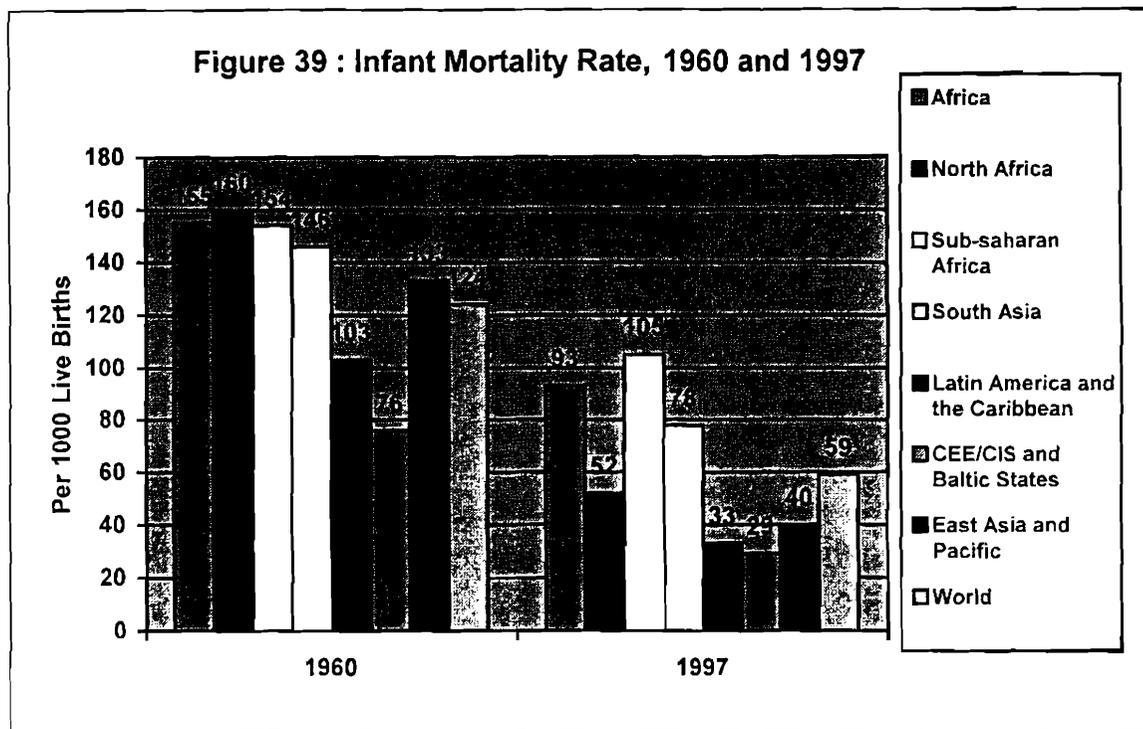
Another challenge, resulting from the lack of access to education in the past, is the high rates of illiteracy prevalent among the adult population. As shown by Figure 11 in Section I, illiteracy among adults is still a feature that distinguish North Africa from the rest of the world as only half of its adult population have acquired the capacity to read and write. The other 50 per cent of the population still needs to be given this opportunity. This huge challenge is shared only with South Asia and Sub-Saharan Africa.

Another structural issue in North Africa is that illiteracy is a deprivation that affect more women than men. Figure 43 clearly shows that adult men had more opportunities to learn reading and writing compared to adult women in all North African countries. Moreover, women in all North Africa are much less equipped in terms of literacy skills compared to other women in developing countries and in the world. Such levels of illiteracy, of women and men, have lasting negative implications on the levels of family welfare, fertility, children's education and productivity.

The Human Development Indicator (HDI) reflects fundamental aspects of social development. It is a composite indicator which reflects the populations achievements in terms of life expectancy, educational levels and access, and income. The 2000 Human Development Report classifies most North African countries in the group of countries that have achieved a Medium Human Development. The exceptions are Sudan and Mauritania which are among those that have achieved a Low Human Development. Figure 44 shows the gap between the economic prosperity in North Africa and the human development of its populations. The graph highlights the fact that, given the same level of income, all North African countries, with the exception of Sudan, could have reached higher levels of human development. To reduce this gap, investments in education, especially to eradicate illiteracy, would be needed.

**Gender Human
Development
Indicator**

The GHDI reflects information on women's and men's life expectancy, literacy rates, combined gross enrolment ratios, and incomes. Figure 45 shows the gap in human development between men and women in North Africa. It highlights the fact that women, while living longer than men, do not enjoy the same level of human development as men, mainly because of their lower levels of literacy, of access to education and incomes. Therefore, higher levels of human development for women could be achieved through higher investments in women's education and a wider access to economic opportunities.



Source : United Nations Economic Commission for Africa, Economic report on Africa, Addis Ababa, 2000.

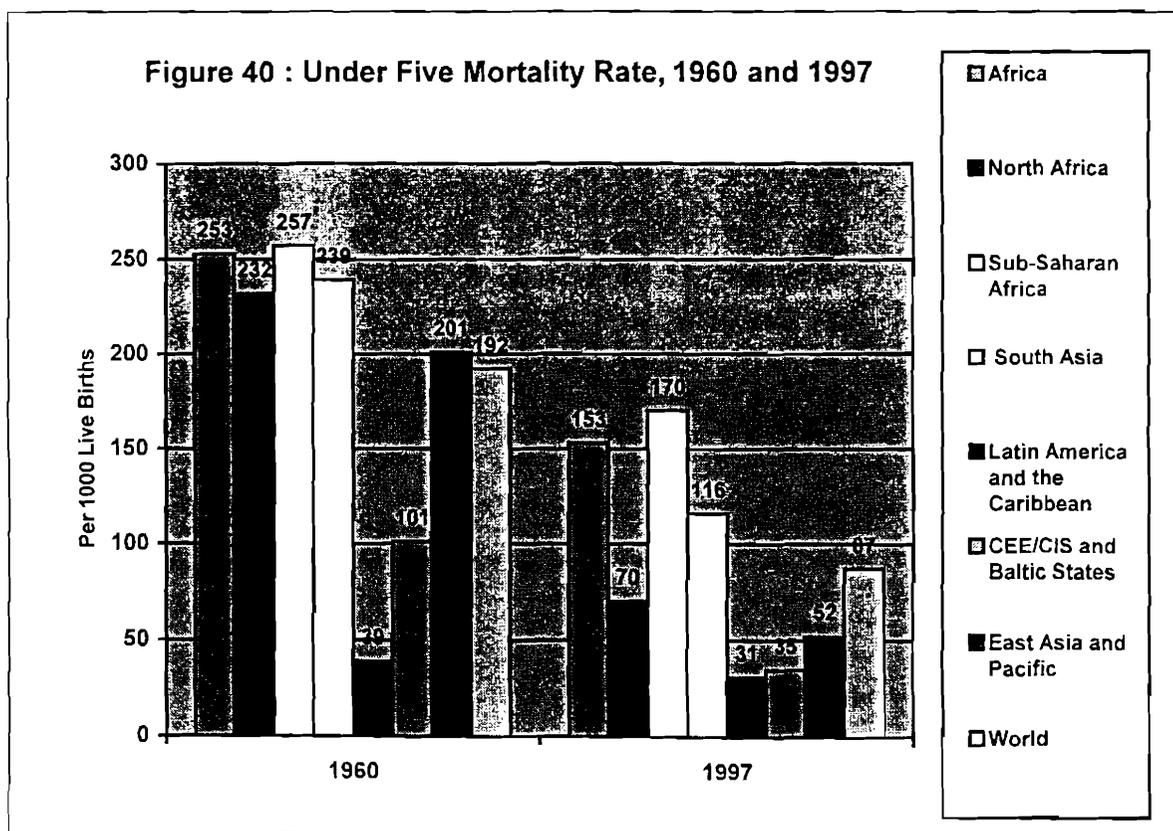
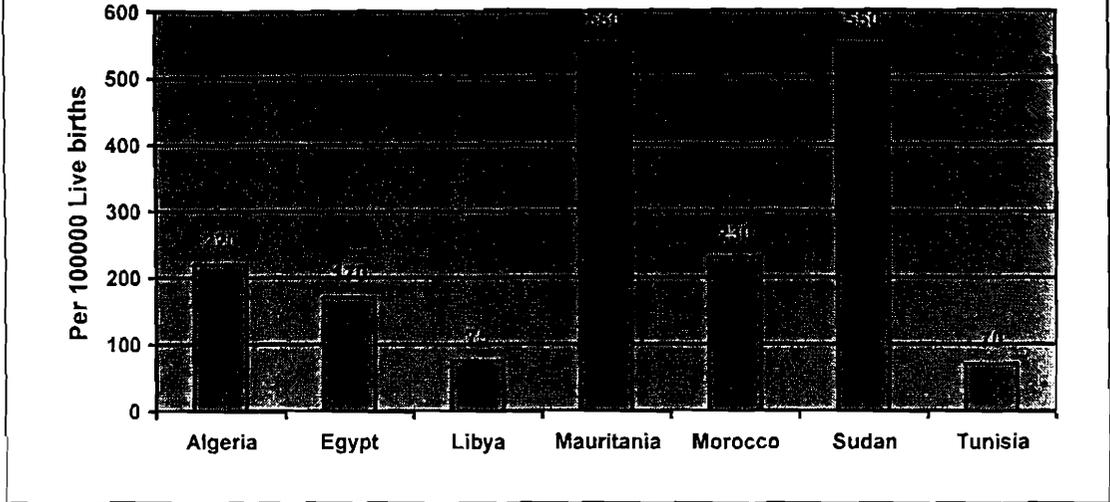
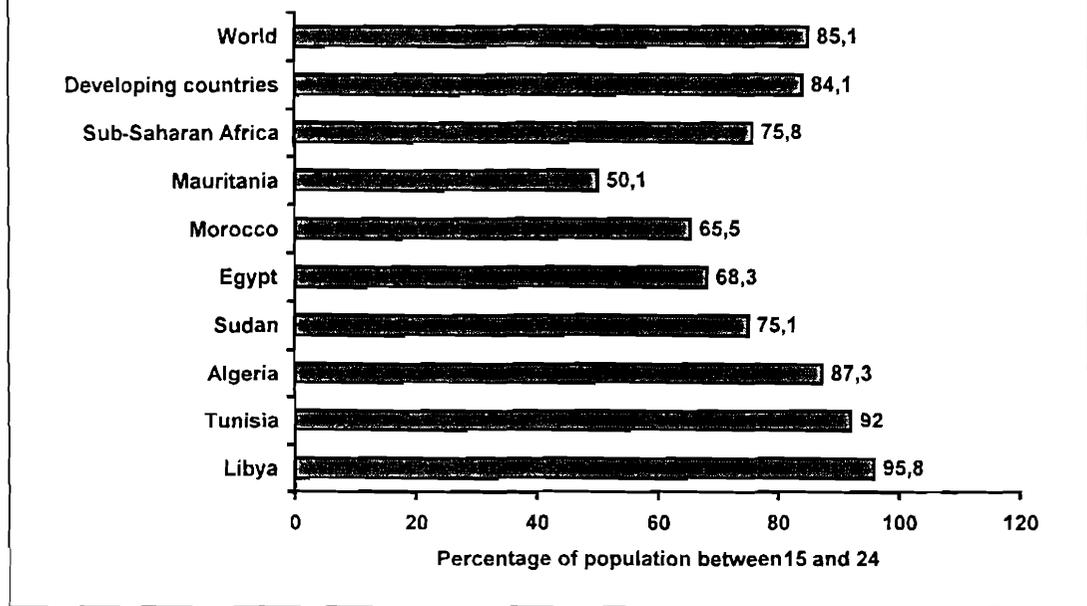


Figure 41 : Maternal Mortality Rate in North Africa, 1990-98



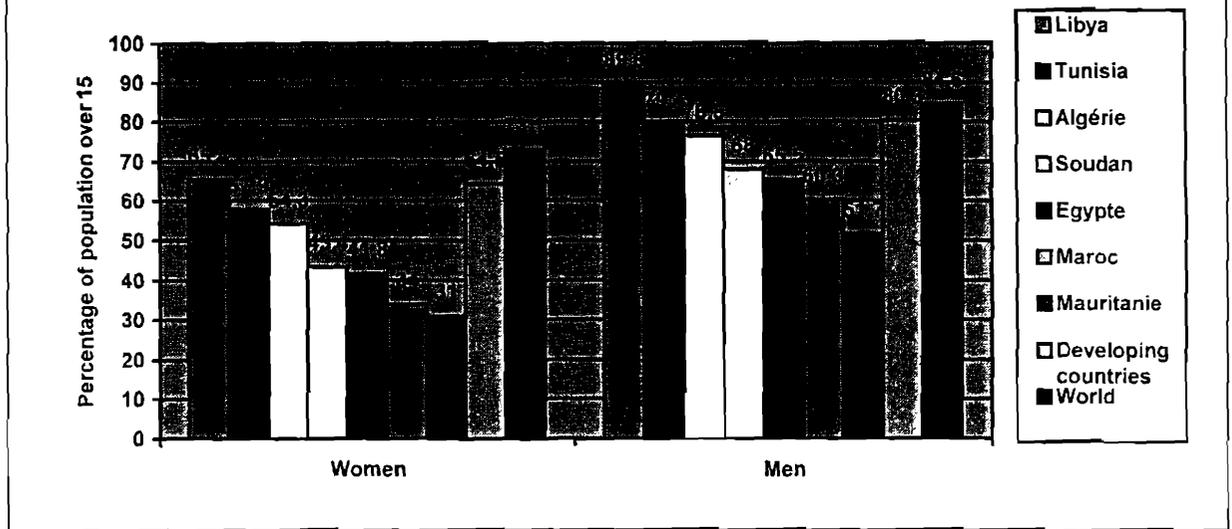
Source : UNDP, Human Development Report, New York, 2000.

Figure 42 : Youth's Literacy Rate, 1998



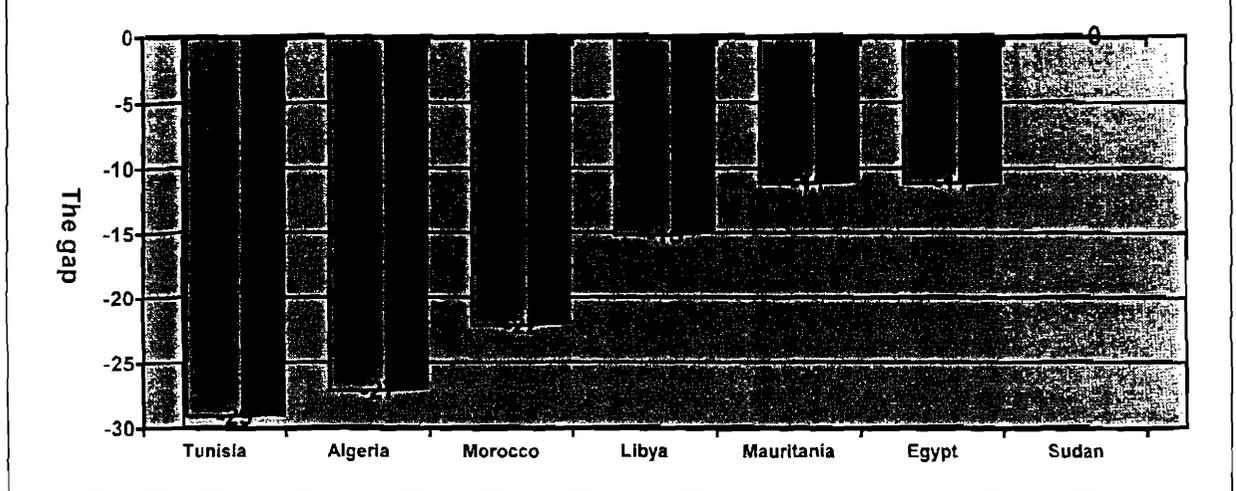
Source : UNDP, Human Development Report, New York, 2000.

Figure 43 : Women's and Men's Literacy Rate, 1998



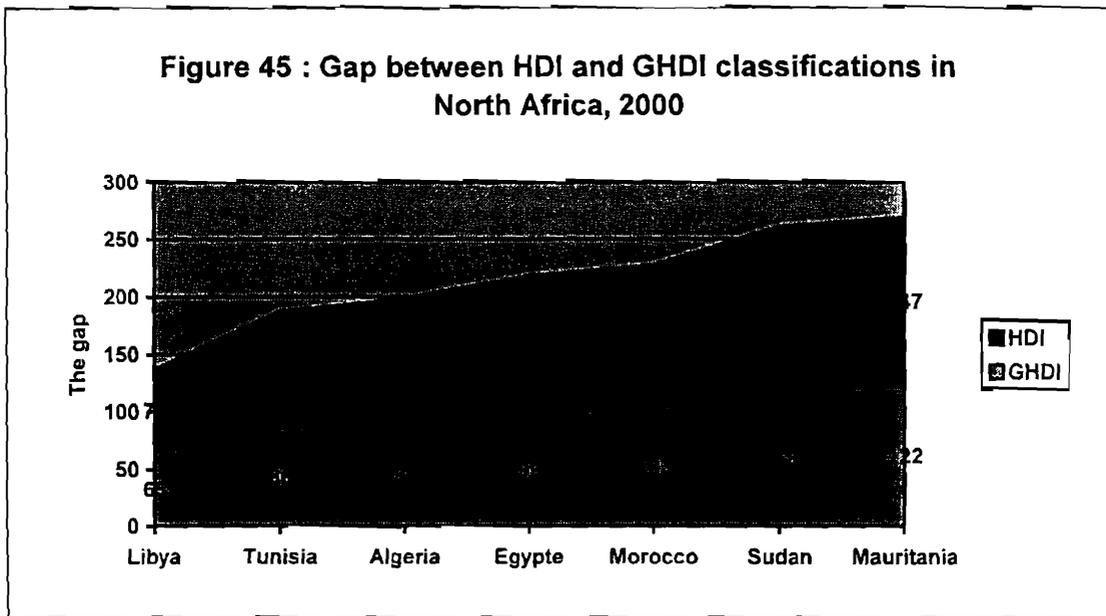
Source : UNDP, Human Development Report, New York, 2000.

figure 44 : Gap between PIB per capita and HDI classifications in North Africa, 2000.



Source : UNDP, Human Development Report, New York, 2000.

Figure 45 : Gap between HDI and GHDI classifications in North Africa, 2000



Source : UNDP, Human Development Report, New York, 2000.

CONCLUSION

STRATEGIC COMPONENTS OF ECONOMIC AND SOCIAL DEVELOPMENT FOR NORTH AFRICAN COUNTRIES IN THE 21ST CENTURY

The preceding structural analysis of the present study, albeit brief and sketchy, does highlight some important issues for policy makers in the whole sub-region and at all levels especially local and civil society leaders, central government administrators and civil servants as well as the highest political authorities. Overall, the issues that emerge from the analysis can be grouped into two possible categories that would facilitate taking appropriate and effective courses of action.

The first group of issues emanate from the important differences in the structural underpinnings of the initial conditions, by the turn of the Century, of the seven economies in the sub-region. In this category of issues, individual countries or subsets of countries that share certain unique conditions have to adopt specific strategies and policies to simultaneously put their respective economies on i) the right and sustainable path of fast economic growth and social transformation ii) a strong institutional footing. Both the growth path and the institutional footing must also have the necessary resilience to continually adapt themselves to face the challenges and exploit the latent opportunities of the changed economic structures and relations in the 21st Century.

The second group of issues relates to the structural aspects that, by their very nature, can best be tackled collectively by all the countries of the sub-region. This group includes issues such as the environment. For this category of issues the countries of the sub-region must work together to develop a clear vision of the sub-region in key areas and adopt a realistic long-term strategic approach to the resolution or alleviation of each of the issue at hand. There is no doubt that in this category of issues the political will of all countries to work towards the common good of the sub-region in some key areas will be of the utmost importance in the first few years of the present Century.

Category I

1. National economic diversification: The structural analysis of the economies of the North African countries clearly demonstrated the different degrees of dependence on a few 'commodity product poles' particularly oil. Economies that exhibit this structural phenomenon to a particularly pronounced degree such as Algeria and Libya have to consider long-term strategies and policies that would engender a more diversified economic restructuring. In addition, all the countries of the sub-region have to seriously review the question of their competitiveness taking the changes in the world economies as their basic point of departure.
2. Agricultural stabilization and growth: The growth of the agricultural sector will remain important to sustain the growing population and to stem the tide of growing poverty particularly in the rural areas. Strategic approaches are needed for most of the countries of the sub-region particularly Algeria, Egypt, Morocco and Sudan. The issue of alleviating the vulnerability of the agricultural sector to climatic changes is also of vital importance.
3. Completing the cycle of economic reforms: The analysis has shown that there are countries in the sub-region that have started to reap the benefits of their reform programmes that were commenced in the 1990s. Conversely, there are countries that are still grappling with some dimensions of the structural reform process. These countries need to complete these reforms so as to get their macro-economic fundamentals in position and create the required environment of economic liberalisation with particular regard to the role of the private sector.
4. Increasing savings and Attracting investments: Savings rates have been shown to vary widely among the countries of the sub-region. It is also more than apparent that in some countries, the government has a higher capacity to save than the domestic private sector especially when these governments get windfall revenues from drastic increases in prices of commodities such as oil. It is therefore important in almost all countries of the sub-region to adopt effective policies and mechanisms to encourage domestic private savings and to channel all savings (public and private) into productive investment. The issue of attracting foreign direct investment is also of particular urgency given the recent trends that point to a decline in foreign direct

investments in the sub-region as a whole. Finally, the resolution of the debt problem has to be reached to be able to release resources for investment.

5. Employment generation: Closely linked to the investment component, is the question of generating employment at a higher rate to be able to confront the growing unemployment of the population particularly the youth. Each country will have to urgently scrutinise its manpower profile in conjunction with the employment potential of its investments to ensure that the pool of unemployed qualified youth does not grow any further as this is likely to have serious implications on social stability in the sub-region. The strategic objective of investing in human capital and technological development should be at the fore in the policy options of the North African countries.

Category II

1. The Environment: Desertification is a phenomenon that affects all countries of the sub-region. It constitutes one of the major environmental problems that the present generation cannot afford to postpone and bequeath to the future. It must be solved or, at worst, alleviated. Programmes to deal with this problem have to underscore two important aspects namely: i) the necessity of collective action at the sub-regional level since isolated country action cannot yield long-lasting solutions to the problem; ii) the importance of involving all stakeholders and, if possible and wherever feasible, creating a bottom-up momentum of environmental protection through non-governmental organisations.
2. The Water Question: In terms of generational survival there is nothing more critical for the future than the water question in the North African sub-region. The analysis in the present report has amply demonstrated that water will increasingly and structurally become scarcer. On one hand droughts are likely to become more frequent thus exposing human and animal populations as well as the flora and fauna of the entire sub-region to more frequent and repeated acute shortages of water. On the other hand, the increasing populations mean a decreasing per capita availability of water. It is in view of these convergent threats to survival that a sub-regional water strategy is urgently called for.