Implications of the Outcomes of the United Nations Conference on Sustainable Development (Rio+20) for North Africa
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<tbody>
<tr>
<td>AFDB</td>
<td>African Development Bank</td>
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<tr>
<td>AU</td>
<td>African Union</td>
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<td>AUC</td>
<td>African Union Commission</td>
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<tr>
<td>DESA</td>
<td>United Nations Department of economic and social affairs</td>
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<tr>
<td>DIVECO</td>
<td>Economic Diversification Program</td>
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<td>ECA</td>
<td>Economic Commission for Africa</td>
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<tr>
<td>EPI</td>
<td>Environmental Performance Indicator</td>
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<tr>
<td>FDI</td>
<td>Foreign Direct Investments</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GEF</td>
<td>Global Environment Facility</td>
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<td>GNP</td>
<td>Gross National Product</td>
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<td>HDI</td>
<td>Human Development Index</td>
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<td>IRM</td>
<td>Islamic Republic of Mauritania</td>
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<td>LDC</td>
<td>Least Developed Countries</td>
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<td>MAU</td>
<td>Maghreb Arab Union</td>
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<td>MDG</td>
<td>Millennium Development Goals</td>
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<td>MSP</td>
<td>Mediterranean Solar Plan</td>
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<td>NEPAD</td>
<td>New Partnership for the Development of Africa</td>
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<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>ODA</td>
<td>Official Development Assistance</td>
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<td>REC</td>
<td>Regional Economic Communities</td>
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<td>Rio+20</td>
<td>United Nations Conference on Sustainable Development</td>
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<td>SDG</td>
<td>Sustainable development goals</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNCED</td>
<td>United Nations Conference on Environment and Development</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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The document entitled "The Future We Want", adopted at the Rio +20 Summit reaffirms the commitments of the international community to give a new impetus to the global partnership for sustainable development launched in Rio de Janeiro in 1992. It calls for the adoption of integrated and balanced global sustainable development approaches, consistent with the principles of Rio, of Agenda 21, of the Johannesburg Plan of Implementation as well as other programs and action plans agreed at the major economic, social and environmental summits. It underlines that the fight against poverty and social exclusion is of uttermost priority.

The outcome document of Rio +20 attributes an important role to United Nations regional commissions in monitoring of the results of the Conference. In particular it calls for them to facilitate the development and coordination of regional perspectives and contributions to global processes related to sustainable development.

This publication is part of the monitoring of the Rio +20 results and part of the preparation of proposals for the sustainable development goals (SDGs) post 2015 by the United Nations General Assembly Open Working Group on SDGs. The publication is also a follow-up to the meeting on the Implementation of the Rio+20 Outcomes in Africa, organized by ECA in preparation of the 20th session of the Commission on Sustainable Development of the United Nations (Addis Ababa, Ethiopia, November 2012).

Through the analysis of the North African context and major development issues, it aims to formulate a regional perspective post Rio +20 and to provide guidelines for the countries. These seek to guide the countries towards an effective integration of the principles and objectives of sustainable development in their policies and programs. It takes into account the different national contexts and the need to transform economies to promote a shared and inclusive growth that considers the environmental dimension (maintenance of ecological balance, optimizing the use of natural resources) and the impact of climate change. The paper highlights the central role that regional integration must play in the quest for sustainable development in the sub-region.

In North Africa, the implementation of sustainable development policies has been largely limited by weak environmental governance capacity and the lack of operational institutional mechanisms. This has not favored coherence and coordination of efforts nor a balanced integration of the three dimensions of sustainable development. Also, the participation of civil society, business and local stakeholders has been inadequate. The gaps in availability of reliable environmental data and lack of integration of the economic value of natural resources in national accounting systems limit the formulation of sustainable policies to respond to the interrelated challenges facing the region: natural resource and environmental degradation, demographic transition and social inequality, poverty, food and energy security, unemployment, water scarcity, climate change and governance.

The transition to more inclusive development models recognizant of the environment implies greater investment in natural capital and innovation. If today, countries believe that the green economy is an opportunity to address these challenges, through its potential to generate new sources of growth and to create sustainable jobs, they will have to implement effective strategies for funding. These should be based on innovative funding models and partnerships including promoting the mobilization of domestic resources and reducing budget deficits.
To meet these challenges, the report offers guidelines divided into seven thematic sectors:

- Sustainable Agriculture and Food Security;
- Green growth, poverty reduction and employment;
- Climate change and disaster risk reduction;
- Desertification, land degradation and water resources depletion;
- Sustainable energy;
- Sustainable management of natural resources and biodiversity;
- Sustainable cities and balanced management of territories.

And six mainstreaming perspectives:

- Efficient integration of the three pillars of sustainable development;
- Integration of education systems in strategies for sustainable development;
- Human capacity building and gender mainstreaming;
- Adaptation of institutional, legal and strategic frameworks;
- Mobilization of funding and partnerships;
- Development and transfer of technologies;
- Sustainable Development Goals;
- Regional integration.

This publication aims to provide strategic guidance to national policymakers and the Arab Maghreb Union (UMA) for the formulation of a post Rio +20 agenda, able to promote the effective implementation of sustainable development, to meet new challenges and to strengthen regional partnerships. It is also a contribution to the ongoing process at regional and continental level for the development of the Sustainable Development Goals (SDGs) for Africa.

Karima Bounemra Ben Soltane
Director of the ECA-Office for North Africa
Summary

Rio+20 was an opportunity for all North African countries to renew their commitments towards the emergence of a unified world that meets the aspirations of current generation, while preserving the rights of future ones to enjoy a viable universe. This event allowed also these countries to shed light on the vulnerability of their respective economies, the serious status of degradation of their natural resources and the persistence of poverty and inequalities, despite considerable efforts being made.

To overcome all challenges and face economic, climate, energy, food and social crises, North African countries have pledged to redouble efforts to reinforce convergence between the three pillars of sustainable development, within a more participatory, transparent and democratic governance.

In this context, the Office for North Africa of the United Nations Economic Commission for Africa took the initiative to conduct a strategic analysis of the implications of Rio+20 commitments on the policies and programs of North African countries. This study aims at providing national policy-makers in each country and in Arab Maghreb Union (AMU) with strategic guidance to elaborate the post Rio+20 agenda. This work is structured in three phases: (i) review of challenges, achievements and constraints regarding the implementation of sustainable development since Rio 92 up to now; (ii) review of the main Rio+20 recommendations and shedding light on their implications for the development of the sub-region, and of each country; finally (iii) proposition of main guidelines that may guide countries in the sub-region towards effectively taking into account sustainable development principles, challenges and goals for the next ten to twenty years (horizon 2030).

Aware of the close relation between environmental, social and economic problems, countries of the sub-region grant a huge importance to the consideration of sustainable development goals and principles into their policies and programs. They have signed almost all protocols and conventions relating to sustainable development, established relatively adequate institutional frameworks, and set up targeted strategies, programs and action plans. By this means, important advancements were achieved, yet differentiated by countries. Political, economic and social contexts and typology of environmental issues, the level of raising awareness, education and participation of stakeholders, challenges of development relating to natural resources are the success or failure factors in the process of sustainable development in each country. Experiences of some countries of the sub-region are today success stories at the level of North Africa, the Continent and worldwide (especially in the fight against desertification, integrated management of water resources, agricultural development, and recently in renewable energies). Through the analysis of the experience of each country as reported in the various national and sub-regional reports relating to sustainable development, an assessment was presented for each of the pillars of sustainable development.

To varying degrees, the seven countries of the region suffer from desertification which destroys the biological potential of soils and the consequences of which are scarcity of water, reduction of soil productivity, biodiversity losses and deterioration of the quality of life. Among causes, some are of natural origin, but others are mainly due to human beings (excessive exploitation of natural resources, inefficiency of public policies and natural resources monitoring systems, poor cooperation between actors, lack of long-term vision ...). Although these problems are the same in a common geographic and economic space, national policies adopted by States to face these circumstances are inconsistent, without any particular coordination, and their efficiency depends largely on available financial resources which come often from international cooperation. In order to overcome the lack of coordination regarding these challenges and, in parallel, enhance the regional integration, AMU put in place a sub-regional action plan to fight against desertification (2011-2020) and a Maghreb agricultural strategic vision by 2030.

Meanwhile, energy security is another major regional challenge. The energy demand, especially on electricity is progressively increasing and the needs are mainly covered by subsidized fossil energy. The important stocks of renewable energies are underexploited (1 to 2%, except hydropower) and the current capacities of electricity production are unable to meet the demand which is expected to
double by 2020. To come out of this situation, countries have initiated to varying extents, a reform of the energy policy aiming at promoting energy efficiency (EE), diversifying the energy mix and exploiting their potential of renewable energy, through installation of wind farms, solar thermal and photovoltaic farms. Large scale projects are planned for the region, some of them are already being implemented in Morocco, Algeria, Egypt and Libya.

Climate change is a major challenge for the sustainable development in the sub-region. It can affect in the short-term the way of life of population and accelerate natural resources degradation. Greenhouse gas emissions, yet very important, change in rainfall and temperatures, the risk of rising sea levels, the more frequent extreme weather events, are all visible signs and challenges to be addressed for this region. It is thus a matter of urgency to take adaptation and mitigation measures on climate adverse effects, to incorporate this issue into policies, programs and projects, at the domestic, national and sub-regional levels. Efforts already made in this regard in the field of agriculture, energy, transportation and industries should be broadened and strengthened. Exploring innovative and appropriate financing methods and elaboration of risk and disaster management plans are the key priorities in this regard.

On the economic scale, despite some progress and the existence of some favorable conditions at large scale (increase in fuel prices and some minerals, signature of interesting trade agreements, ...), constraints still persist and hinder the economic pace of the region and should be addressed. These constraints include: (i) vulnerability of economies towards climate change and their excessive dependence on natural resources; (ii) the poor diversification and limited industrialization; (iii) an economic growth unable to create enough jobs.

On the social front, except from Mauritania and Sudan, countries of the sub-region have a regular human development, with substantive achievement in the fight against poverty and considerable progress towards the achievement of the millennium development goals by 2015. Nevertheless, this should not overshadow some constraints such as unemployment, inequalities between social categories and between regions, the increasing migratory flows or food insecurity. We should also mention the poor integration of sustainable development in the education system, which is the sole way of behavior changing, comprehension and ownership of these challenges among the current and future young generations.

The countries in the sub-region recognize the necessity to adapt the global institutional system and that the current global institutional structures do not meet adequately the needs of Africa regarding management of environment issues, climate change, and the harmonious integration of the three pillars of sustainable development. The extension of the prerogatives of the UNEP and strengthening its financial resources, recently adopted by the United Nations general assembly contribute to support the suggestions and positions of the countries of the sub-region at Rio+20 conference. Given its geographic situation and the interest it grants to Africa, the development of the role and mandate of the UNEP is a major step towards strengthening the institutional and strategic framework of sustainable development. Strengthening and harmonizing these programs with those of other sub-regional institutions will allow: (i) improving the integration of the three pillars of sustainable development into national and regional sectoral policies; (ii) the consideration of emerging challenges regarding sustainable development; (iii) identification of priorities relating to sustainable development goals; (iv) the transition in policies and programs relating to green economy; (v) identification of innovative financing mechanisms and partnerships, and (vi) capacity building in terms of monitoring and assessment of sustainable development policies. Consultations launched by the United Nations system, in collaboration with various development institutions, relating to the identification of sustainable development goals, on one hand, and the preparation of post-2015 Agenda, on the other hand, can be an opportunity for the relevant countries in the region to make advancements on propositions made in this report.

Aware of the importance of the world economic crisis and the new challenges facing developed countries, North African countries should explore innovative ways in terms of financing sources and mechanisms. The private sector in the sub-region has a significant role to play in this context. The Green Climate Fund, launched in 2011 at the COP17, can be today an alternative to be explored to support the gradual transfer toward a green economy and for a better consideration of mitigation and adaptation measures on climate change. Meanwhile, North Africa can take advantage from the voluntary commitments, amounted at about USD 700 billion, expressed at Conference of Rio+20, in specific key fields for sustainable development.
The United Nations General Assembly decided, at its 67th session, the creation of an open-ended working group on the sustainable development goals, in line with the outcome document of the UNCSD (Rio+20). This working group will be in charge of elaborating precise and concise sustainable development goals, world-wide, for the post-2015, and will submit its proposal to the sixty-eighth session of the General Assembly in 2013. Four countries of the sub-region are included in this working group, namely Algeria, Egypt, Morocco and Tunisia. In the same vein, a high-level group will be in charge of leading reflection and consultation on post-2015 development agenda and to prepare the United Nations Summit on MDGs in September 2013.

In Africa, the ECA has launched a regional consultation process to allow African countries participate in the global process aiming at identifying SDG, and ensuring the consideration of development priorities of the continent. In this context, the ECA will support in 2013: (i) the preparation of five sub-regional reports and the regional report on the major priorities of sustainable development and proposals of SDG, and (ii) the organization of a regional consultation meeting to identify priorities of sustainable development and propose SDG for Africa.

Consultations initiated will allow identifying goals, indicators and targets to support the SDG. Countries will try to make them: (i) rigorous, meaningful, clear and measurable; (ii) in line with the principles of sustainable development identified in Rio in 1992 with a major concern for the eradication of poverty; (iii) a solution to the integration of the three pillars of sustainable development; (iv) informed by databases and results already accomplished in the framework of the follow-up of the MDGs in each country; (v) integrated in the system of data gathering, analysis and management at the regional level and at the level of each country.

For the transition towards green and inclusive economy, suggested recommendations depend on achievements already accomplished by each country. However, priority should be given to improving knowledge, transfer of technology, to the economic assessment at the macro, meso and micro levels, to the mapping of offer and demand of jobs, and to the support of innovative financing initiatives. All in a spirit of reducing poverty and ensuring food security. Beyond all achievements in this context, countries may agree on the following points: (i) importance of the interaction between the three dimensions of sustainable development and the need to promote green economy an effective implementation of sustainable development in socio-economic fields; (ii) the need to enter into a transition towards green and inclusive economy; (iii) harmonization between priorities to food security, fight against poverty, and job creation, especially for youth, on one side, and the integration of the transition towards green economy as a strategic challenge in the development patterns, on the other side; (iv) the necessity to develop green plans and tools of switching production system adopted in the countries of the region to form a basis that ensures continuous and gradual transition towards green economy. This transition implies development of appropriate tools of financial and technology support; and (v) strengthening the cooperation and international solidarity that play a major role in the management of cost-effective transition towards green economy of the countries in the sub-region.

Finally, the huge importance of the role of the United Nations Agencies and regional and sub-regional organizations (such as MAU) to support countries of the sub-region is considered as crucial. Partnerships at the sub-regional and international level will be signed to allow actors capacity-building and facilitate clean technology transfer. Innovative financing should be sought through equity capital by country, enhancing the public-private partnership, exploring mechanisms relating to major agreements, carbon markets, and clean development mechanisms.
INTRODUCTION

In June 2012, the International Conference on Sustainable Development "Rio+20" was attended by nearly 50,000 participants, 80 of whom are heads of State or government. Twenty years after the Earth Summit in Rio, a new meeting was held in the context of the unprecedented international, economic and ecological crises, marked by: (i) extreme financial weakness; (ii) an increasing global demand for food and energy; (iii) a substantial depletion of natural resources and biodiversity; (iv) the tangible negative impact of climate change; (v) development disparities, growing wider between countries; (vi) deep social inequalities (increasing rates of unemployment and poverty).

The main objective of the Summit on Sustainable Development Rio+20 was to assess the progress made and the difficulties encountered in the implementation of Agenda 21(Rio 92) and the 2002 Johannesburg Plan of Implementation. The work led to a declaration, called "The Future We Want", and considered as a road map for a greater consideration of sustainability issues.

Despite some mixed results, it must be recognized at the end of the summit, that there are many positive points about the meeting. First, the declaration is a truly collaborative document, result of a long negotiation process, which can be seen as a breakthrough, considering the current international situation. Furthermore, the conference was able to maintain the foundation for international cooperation, reaffirming the commitments made on sustainable development (from Rio to Johannesburg). During the conference, members acknowledged progress but also shortcomings in implementing cooperation policies and partnerships.

Finally, the following major agreements were reached: (i) shaping targeted and accurate Sustainable Development Goals (SDGs), taking into account the priorities, characteristics and capacities of each country. The SDGs are intended to be universal objectives applying to all countries, complementary to the MDGs, and must be consistent and integrated into the post-2015 development agenda; (ii) strengthening the UNEP capacity of action, particularly through promoting universal membership and increasing its resources; (iii) strengthening the institutional framework for sustainable development; (iv) integrating the green economy as a major instrument for achieving the SDGs with the technical and financial support required, while allowing flexibility to countries to help them issue policies lifting trade barriers; (vi) honoring the commitments made by developed countries in Official Development Assistance (ODA) and assessing the financial needs in order to prepare an effective strategy for financing post-2015 sustainable development; (vii) identifying options for setting up a facilitation mechanism that promotes access for developing countries to environmentally-friendly technologies.

In this context, the contribution of North African countries in the preparation of the UN Conference on Sustainable Development was carried out, within the framework of the overall effort of African countries in particular, and by the international community in general, for an environmentally-friendly development. Indeed, in their preparatory reports to Rio+20 conference, countries in this region have reaffirmed their commitment to the principles of Agenda 21, including common but differentiated responsibilities (respective capabilities), but also to the Johannesburg Plan of Implementation (2002), and to all initiatives underway, including the Arab Initiative for sustainable Development adopted at the Algiers Summit in 2005.

Thus, most countries in the region, since the Johannesburg Summit in 2002, stepped up their efforts in the field of environmental protection and sustainable development, giving prominence to ecologic features in their public policy.

Rio+20 was an opportunity for all countries to renew their commitment to work towards the emergence of a unified world that meets the aspirations of today’s generations, while preserving the right of future generations to enjoy a sustainable world. This meeting was also an opportunity for the countries to highlight the vulnerability of their economies, the serious degradation of natural resources and the persistence of poverty and inequality, despite the considerable efforts that have been carried out. To meet all these challenges and cope with economic, climate, energy, food and social crises, North
African countries are committed to redouble efforts to achieve greater convergence between the three pillars of sustainable development, under a transparent and participatory democratic governance.

In this context, the Office for North Africa of the United Nations Economic Commission for Africa, has suggested to conduct a strategic analysis on the implications of Rio+20 commitments relating to policies and programs of North African countries. Its main objective is to provide national policy-makers in each country and the Arab Maghreb Union (UMA) with strategic guidance for the development of post Rio+20 agenda.

In accordance with the study’s terms of reference, this agenda should on the one hand, incorporate the operational implementation of the integration strategies of sustainable development, and on the other hand, meet new challenges. This can happen mainly through:

- Improving the integration of the three pillars of sustainable development in a holistic and cross-sectoral manner at all levels;
- Taking into account new and emerging challenges for sustainable development;
- The development of innovative financing mechanisms and partnerships;
- Promoting regional and international cooperation;

This report focuses on the following three chapters:

- **Review of regional and national reports on sustainable development policies.** Through analyzing contexts and issues. As stipulated in the terms of reference, particular attention has been paid to the impacts of climate change, the risks of natural hazards, poverty reduction, and policies to combat unemployment, especially among young people. The progress achieved by each country and by the sub-region towards sustainable development, as well as the relevant priorities identified in their policies shall be, as far as possible, a key part of this analysis.

- **The strategic implications for effective implementation of the Rio+20 outcomes, by the countries of the region and MAU.** After reviewing the main outcomes of Rio+20 and examining their consistence to the development policies in the sub-region, the analysis will focus on the one hand, on the extent to which current and future challenges and priorities of Maghreb countries are taken into account, in the outcomes of the Conference; and on the other hand, on the scope of global potential impact of these outcomes on this region.

- **Proposed key guidelines.** They will be formulated on priority themes identified by countries and relevant to the sustainable development goals in the sub-region. Particular attention will be given to the promotion of green economy with the objective of eradicating poverty and reducing unemployment, as a way out of the difficult political climate in this region.

This work has taken into account a number of constraints. First, the availability of documentation varies widely between countries, and also in terms of quality and quantity. In addition, the logical and analytical formats, priorities, and the level of details are often different, which made the comparison work hard enough, and imposed an aggregation of themes and sometimes smoothing processed information. Preparatory reports to the Rio+20 conference regarding Libya and Sudan could not be found. Moreover, the review of available information on the latter is problematic because of the split of territory into North Sudan and South Sudan, which affects the potential of the country (including natural resources) as well as the socio-cultural composition, natural and political constraint and, therefore inevitably, development prospects.
CHAPTER I
REGIONAL AND NATIONAL REPORTS ON SUSTAINABLE DEVELOPMENT POLICIES

1.1- Analysis of the context and challenges

Mindful of the close links between environmental, social and economic problems, countries in the sub-region have been able to give prominence to the consideration of the objectives and principles of sustainable development into their policies and programs. They signed most of the protocols and conventions relating to sustainable development, implemented relatively adapted institutional frameworks, introduced targeted strategies, programs and action plans. Thus, significant but differentiated progress has been made depending on countries. The political, economic and social contexts, the types of environmental issues, the level of awareness and education, stakeholder participation or development issues on natural resources are key factors to failure or success in achieving sustainable development by each country.

The general awareness of the challenges of sustainable development has resulted in political, institutional, regulatory and financial reforms in most countries. Significant progress has been achieved in the following areas: (i) renewable energy, energy efficiency in Morocco, Tunisia, Egypt and Algeria; (ii) the fight against desertification and the protection of marine and coastal ecosystems in Mauritania and Algeria; (iii) agricultural development in Morocco; (iv) the governance of sustainable development in Tunisia; and (v) climate change in Egypt. Experiences conducted by some countries in the sub-region represent now genuine success both across North Africa, the continent and around the world (especially in the field of renewable energies).

Based on the analysis of the experiences of each country, as they were delivered through various national and sub-regional reports relating to sustainable development, an overview will be presented on each of the pillars of sustainable development. It will be voluntarily brief and structured around the facts, achievements and constraints, given that the reader can review the reports for each country depending on the level of detail sought.

1.1.1 Economic overview

1.1.1.1 On the sub-regional level

The sub-regional economic dynamics is supported by a number of key sectors such as agriculture, mining, hydrocarbons or even tourism. An average economic growth rate of 5% was regularly achieved over the period from 2000 to 2012, with a significant decline in 2011, almost zero growth (0.5%), a slight improvement in 2012 (2.3%), and interesting prospects for recovery in 2013, nearly 5%1. The sharp fall in economic growth rates for 2011 is largely justified by the political unrest the region has witnessed during this period, including Libya, whose growth has been extensively negative. Moreover, it is noted that most countries in the sub-region experienced a large deficit in their current account, including trade deficits due to the decline in production and the decrease in exports of goods and services combined with a significant reduction in foreign direct investment (FDI). It fell by 42% in 2011 to reach USD 9.48 billion, when, at the same time, it increased in other parts of the continent. For example, Sub-Saharan Africa has seen an increase in foreign investment of 25% for the same year.

The review of foreign investment, from one country to another in this area, reflects significant exchange between European countries and countries such as Tunisia and Morocco. Energy and mining are the sectors mostly targeted by cross-investments. There are some other promising sectors, great development vehicles: (i) agriculture, with the increase in the value chain and the establishment of food-processing industries. In addition, another significant dimension regarding knowledge and expertise

1 Economic and social conditions in North Africa 2011-2012. ECA, 2013
sharing in this field; (ii) the service sector that benefits from major assets in this region, including demographic potential, with a young population. Education and training can contribute to increase value added in the services sector. Furthermore, review of regional trade shows that North Africa has not been able to create sub-regional consumer markets, despite a significant overall potential.

Algeria, Egypt, Sudan (southern part) and Libya have large reserves of oil and gas, while Morocco and Tunisia remain major energy importers. As for Mauritania, it has an important hydrocarbon potential still untapped and does not meet consumption needs of the country. In energy field, there are real opportunities for trade and economic development of natural resources in this region. However, as a matter of fact, most of the gas produced in the region is exported, to Europe in particular. Future projects planned in this field (pipelines from Algeria and Libya) by the relevant countries, confirm this trend to target Europe to the detriment of other North African countries.

Regarding electricity, the exchange between the Maghreb countries is slightly better, since there are many interconnections across the region: (i) electricity transmission between Morocco, Algeria and Tunisia (ii) interconnection between Libya and Egypt. However, the economic significance of these exchanges is limited to the extent that Egypt, which holds nearly 50% of the electrical capacity of the sub-region, remains a strategic partner for the Mashreq countries. Mauritania still does not belong to this area, because of its week power network, and the orientation of its current and future projects to neighboring West African countries, namely Senegal and Mali.

In addition, there are still large disparities between countries in terms of economic performance, achievement of economic and political reforms and openness. Delays experienced by some countries, such as Mauritania and Sudan, in infrastructure development are detrimental to economic development not only in these countries but also of the entire sub-region.

These are examples of the various lost opportunities for the economic development in the sub-region. None of the Maghreb economies is now sufficiently developed to ensure its own prosperity. They can only reach it through their unity. Capitalizing reciprocally on strengths and potential of each country must be subject to further reflection and a win-win partnership for the benefit of economic development throughout the region.

The economic integration of the region was discussed on January 8-9, 2013 in Nouakchott, at the 5th Conference dedicated to this subject by the MAU. At this conference, where many economic and financial stakeholders in the region, and the international community (including the IMF and World Bank) took part, focus was on the importance of economic growth potential of the region and its ability to reduce unemployment, especially among young people. However, all observers have noted the low development of this potential, and also trade that remains at very low levels within the region, with only 3%, far from the figures achieved in Asia or Latin America, and is especially insufficient to stimulate growth across the region. Among the reasons put forward to explain this delay are the closure of borders between Algeria and Morocco, insecurity in some countries of the region, disparities in economic performance, and also the privileged course of trade with other economic communities, including the European Union, the main economic partner of these countries.

1.1.1.2 Economic overview by country

Algeria has developed and implemented a number of strategies aiming at a sustainable economic growth as well as poverty reduction and improved competitiveness. The country now enjoys significant macroeconomic assets: (i) a dynamic economy with an average annual rate of GDP growth of nearly 4% over the last decade. The year 2012 was characterized by a growth rate of 2.5%, an inflation rate of 8.9% and a budget deficit of 4% of GDP.

However, two important endogenous factors curb the Algerian economy. It is on the one hand, inflation (nearly 9% in 2012), and on the other hand unemployment rate (about 10% in total and 21% among young people). The inflation rate in 2013 is expected to be around 8% due to poor global economic conditions predicted, the wages increase policy decided by government, and the malfunction of channels of production and distribution of foodstuffs that make up 43% of the price index.

\[\text{Note of the IMF on the economic performances of Algeria, 2013.}\]

Algeria is a major importer of agricultural products, especially wheat (6 million tons in 2012), with an index of consumer prices greatly influenced by foodstuffs. The Algerian government has established a system of subsidies for essential commodities (bread, cooking oil, sugar, water, gas, electricity, fuel ...) in order to curb inflation. The cost of these subsidies is around 1.1% of GDP in (2012).

To address the dependence on hydrocarbons, Algeria launched since 2009, with the assistance of the European Union, a support program for the diversification of the economy (DIVECO 1). Diversification strategy will particularly involve agriculture, food-processing industry and tourism in order to improve their economic performance in the domestic market and for export. More than 60% of the budget of the program, which is around 20 million Euros, is intended for agriculture, while the remaining is allocated to both tourism and industry. The program grants great importance to capacity building and the provision of equipment and services in targeted areas.

Algeria has spent nearly USD 65 billion in gross fixed investment in 2011, 15% more than in 2010. Much of this investment was spent on infrastructure of hydrocarbons distribution. In addition, several measures to strictly regulate foreign investment have been created since 2008, and were formalized in the 2009Complementary Finance Act. These measures include: (i) the rule of the majority national partnership (51/49) in industrial and services sectors, (ii) the need for foreign investment to provide a balance in currency surplus in favor of Algeria throughout the life of the project, (iii) limitation of transfers of dividends, profits, and real net proceeds of the sale or liquidation of foreign investments, (iv) 20% tax on capital gains deriving from the selling by non-residents of their company stocks or shares.

The Algerian government continues its 2010-2014 investment plan of USD286 billion focusing on the development of non-hydrocarbon sectors, including infrastructure upgrading (roads, highways, railways, ports, dams, housing, educational and health facilities), increasing the richness of local expertise and support to small and medium enterprises (SMEs). It is also expected to launch a factory devoted to steel and related products, with an initial production capacity of 2.5 million tons/year, which will eventually be increased to 5 million tons/year; and thus help the country move towards self-sufficiency in this sector.

Despite all these efforts, Algeria is still struggling to develop a policy less dependent on hydrocarbons. The capitalization on the results of different programs of economic diversification, in addition to the development of the economic and social impact of hydrocarbons annuity, as requested by economic actors in the country, will still allow Algeria to boost productivity in targeted sectors to ensure a more inclusive and robust long-term growth. This should however be backed by structural reforms to attract foreign direct investment, develop the financial sector and provide the workforce with skills the economy needs.

**Egypt:** The political reforms aiming at improving economic growth have continued after the revolution. This economic growth, which was ascending until 2008, fell from 5.1% in the fiscal year 2009/10 to 1.8% in 2010/11, according to estimations; while it is pegged at just under 2% in 2012.

The political and social demands movements hit with full force tourism and foreign direct investment (FDI), two major sources of foreign exchange reserves. The Central Bank of Egypt does not have enough currency to maintain the exchange rate of the Egyptian pound. The Egyptian government estimates the economic cost of this revolution at about 4% of GDP per fiscal year (period of 2010-2012), be it more than 50 billion of Egyptian pounds. Given the sharp decline in the tourism industry (one of the Egyptian economic pillars and employment-intensive sector), the Suez Canal, communications, energy, construction and real estate were the largest contributors to growth during this period. Experts in economics estimate that in the near future, economic dynamics will be driven by consumption and less by investment and exports. The government has implemented economic and social measures in order to alleviate prices of essential commodities as well as the discontent due to high rate of unemployment. Unfortunately, these measures were not successful in the long-term because of many economic challenges Egypt has been facing (budget deficit, breakdown of oil stocks due to unpaid bills, supply difficulties...).

Egypt has accumulated a debt of more than USD 5.2 billion from oil companies half of which are arrears. This illustrates the challenge of the increasing energy bills that faces the country while it subsidizes gasoline so as to maintain social peace. The country has multiplied increased late payments...

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to oil and gas producing companies in Egypt because of the decline of foreign exchange reserves or even due to the rise of main agricultural raw materials prices and the decline of tourism incomes since the unrest in 2011.

Natural resources such as soil, water and hydrocarbons, continue to play an important role in the economic dynamics in Egypt. The Ministry of Petroleum and Mineral Resources has launched the foundations of the largest project in the production of polyester in the Middle East. This project will be implemented in Ain Sukhna in the special economic zone, northwest of Suez Gulf. It will be supervised by the Egyptian Petrochemical Holding Company. During the last five years, the private sector accounted for around 62% of GDP. This sector employs about 70% of the active population in the formal and informal economy. However, popular uprisings have interrupted a decade of the State’s strong commitment to strengthen the business environment. For instance, in 2010/11, Egypt was ranked 81st out of 146 countries in the World Economic Forum’s global competitiveness index. But, in 2011/12, it fell back to the 94th position. Egypt also dropped two positions in the 2012 World Bank’s Report on Doing Business, obtaining the 110th position out of 183 countries. These results can be linked to the political unrest that still engulfs the country.

One of the main challenges facing Egypt is finding better ways to restore confidence and create an environment conducive to direct foreign investment, especially in tourism industry. The other main challenge is to stop the depreciation of the currency and strengthen the country’s foreign reserve position, which currently covers only 3 months of imports. Finally, the Egyptian government has to get on boosting growth, creating jobs and improving efficiency of public service. An economic reform program is being finalized with the IMF. It has now been established that this program will suggest a rise in prices of mainly: gas and electricity... and cuts in oil price subsidies. These measures might shake more the social climate in Egypt.

Libya: Since international sanctions were lifted in 1999, Libya has undertaken reforms to open up its economy and to use its natural resources in a rational manner. It consists of: (i) structural, (ii) regulatory, (iii) monetary policy, and (iv) finance and banking sectors reforms. Over the last 10 years, the average annual growth rate in GDP is estimated at 3.3%, with a major disruption in 2011 due to socio-political problems that have shaken the country. Libya is flush with liquidity due to its large oil and gas revenues. The benefits of this liquidity can be seen in the budget and monetary policies, as well as in the country’s external financing position. Until 2010, hydrocarbon industry accounted for 70% of GDP and 95% of exports.

The government largely controls production and distribution, thus limiting the activity of the private sector. The latter evolved primarily in the fields of agricultural products processing, and the small businesses sector covering chains of petrochemicals, production of iron, steel and aluminium. Manufacturing, non-oil and construction sectors, account for 20% of GDP, and have developed over the recent years.

The year 2008 was an essential year marked, on the one hand by the upsurge of oil prices, and on the other hand by the growth of non-oil sources, such as construction, transportation and trading activities. The rise in oil prices and the increase in investment have led to a huge financial surplus and a positive foreign balance. This trend has stopped due to political unrest in 2011.

Given the current political problems, the country faces high food prices on the international market, being obliged to import almost 75% of food products. After a period of stability around 2.4% in 2009 and 2010, inflation rose to nearly 16% in 2011 to fall to nearly 8% in 2012. Some analysts estimate that inflation is expected to be around 5% in 2013.

The Libyan industry is mainly based on refining oil, petrochemical and steel industries. Hence, foreign investments are needed to diversify the economy, which is highly dependent on oil and vulnerable to market adversity. The new Libyan context should result in an influx of foreign investors and FDI are expected to increase in 2013. Nevertheless, the economy recovers right after the Civil War and 2012 will not bring any important changes compared to 2011. Gross investment was around USD 10 billion in 2010. There was in 2011 a contraction of nearly 18%, while funds from FDI accounted for over 37% of gross fixed investment in 2010. Furthermore, foreign investment in Libya remains subject to having a partner in

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4 Economic Intelligence Unit, October 2012.
the country, which is binding in view of the low level of training and expertise in Libya, besides the lack of reliable statistics for market research.

The unexpected fast recovery at the level of oil production, thanks to the joint effort of Libyan and foreign companies, has restored oil revenues (natural gas exports to Italy reach 9 billion m³ while exports of crude oil exceed 1.1 Mb/d). According to the World Bank report of 2012, Libya’s economy will achieve a growth of 100.7% in 2012 (following a contraction of nearly 60% in 2011) thanks to investments in the reconstruction that stimulated economy and oil production. The latter moved from 500,000 barrels per day in late 2011 to 1.42 Mb/d in July 2012.

Nevertheless, the Libyan economy remains uncertain given the current political situation. Economic growth and the financial situation have been consolidated, thanks to significant oil revenues, improvement of infrastructure and the growing interest from foreign investors. According to forecasts⁷, oil production should reach 3 Mb/d by 2013. This increase was calculated based on the large foreign investment and on the use of modern technologies by these investors. Libya operates considerable restrictions on imports, which regularly causes shortage of basic goods and foodstuffs.

The development of Libya is based on numerous factors namely the abundance of oil and gas resources, a young population and yet small (6.4 millions) and a strategic geographical position between Europe, Africa and the Gulf Arab countries. The challenge facing currently the economic partners of Libya is about resuming infrastructure projects suspended since the 2011 political turmoil, the launching of new development projects as well as support to oil exploration. Recent IMF forecasts indicate that covering significant costs of reconstruction and the private demand, growth outside oil sector will reach an average of 15% over the period between 2013 and 2018. The new companies’ Act adopted by the Libyan government, will allow the private sector in Libya to participate more broadly in the economic growth of the country.

**Morocco**: the reforms undertaken by Morocco targeted the modernization and expansion of basic services throughout the country, both in urban and rural areas through a so-called “proximity” development pattern. These structural reforms were launched thirty years ago, and include macroeconomic strategies and others relating to the liberalization of foreign trade, transportation sector, financial sector and the privatization of public enterprises. Considerable, but uneven, progress has been made in the implementation of these various reforms.

Gross fixed capital formation reached about 31% of GDP, while FDI accounts for 10% of gross fixed capital investment in 2012. The attractive sectors for FDI are textiles, electronic components, services abroad and tourism. It is worth mentioning that Morocco achieves a steady growth in FDI (more than 60% in 2010-2012), where at the same period the sub-region of North Africa witnessed its FDI being cut down into half.

Morocco focuses on developing infrastructure relating to energy, especially renewable energy (a USD 0.3 billion to build a solar power plant near Ouarzazate). The government program for 2012 targets to boost growth of SME and tourism and to continue investing in other infrastructures (inauguration of much more roads and highways).

Despite this economic performance, it remains insufficient to set the foundations for an accelerated growth in order to initiate a process of job creation, to achieve sustainable poverty reduction. Some constraints can be listed as follows: (i) The persistence of poverty zones and the high level of unemployment among youth, (ii) a business climate that is still below expectations, (iii) lack of diversification in the productive base of the economy and exports.

Morocco has started a unique experience in terms of job creation through microfinance. This sector has demonstrated its beneficial effects in the Moroccan financial system, and which is today a huge economic and social driver. It plays a role in the financial integration, poverty reduction, and integration of economically disadvantaged category of the society through creating jobs and income-generating activities. In 2011, this sector would have created almost a million permanent jobs and about six thousand direct jobs. For the next ten years, the Moroccan government plans to use the microcredit mechanism to create two million permanent jobs instead of one million currently estimated.

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⁷ Country Engagement Note, 2009. AFDB
Mauritania: Since independence in 1960, economy in Mauritania has been dependent on natural resources: starting with iron only, then associated with fishing and finally with oil and other minerals (Gold, Copper ...). The severe droughts of the 70's caused a massive rural migration to urban areas and put pressure on the government since educational demand increased, as well as in housing, employment, health care, and other administrative services. Mauritania still faces the same pressure today.

The primary sector, on which more than 60% of the population depends, was the least to contribute to the overall growth (0.6 points) in this period. This is due, in part, to the difficulties encountered during the crop year in irrigated agriculture since 2009, due to funding problems because of the high rate of unpaid bills to Credit Agricole (UNCACEM). These difficulties are cumulated with more traditional ones, relating to rainfall deficit, irrigation systems weaknesses, poor infrastructure and lack of inputs and of technical and productive skills. The limited contribution of the primary sector to the overall growth can be explained by the low integration of the sub-sectors of livestock and fishing to the economy. Moreover, the strong dependence of the Mauritanian economy vis-à-vis food products, including cereals, was exacerbated in 2012 when imports reached 90% of the demand for grain.

Mauritania has carried out a number of major reforms such as strengthening institutions that control public finances, improving the investment climate and adopting a new Code of public procurement. Since 2005, the country's economy has experienced several positive and negative shocks. Between 2004 and 2009, Mauritania has witnessed two coups d’État followed by a transition towards an elected government. Mauritania’s acceptance of the Multilateral Debt Relief Initiative in 2006, the beginning of oil exports, the successive food, financial and political-institutional crises, as well as the boom in the mining sector have been major factors of change in economic aggregates during this period. The economic performance of Mauritania was relatively steady from 2004 to 2006, while the annual rate of GDP growth has been 4 to 5% despite the onset of the political crisis in 2005. In 2012, productions in the three major mineral resources (gold, copper and iron) contributed up to 27% of GDP. Oil production moved downward by 12 million barrels in 2007 to less than 3 million barrels in 2011. Iron production is about 11 million tonnes in annual average over the last five years. In 2012, productions of copper and gold were 50,000 tons and 2,617,813 ounces respectively.

Mauritania suffers from a serious shortage of power resources, which could not be absorbed by long-lived solutions for many years. The increase in aggregate demand of power in Mauritania in 2017 was estimated at more than 500 MW, divided between domestic demand (about 150 MW) and the demand of mining companies associated with the development of new projects (about 400 MW). The gas exploration offshore campaigns were identified and quantified at the Banda field (and Tevet), currently operated by Tullow Oil, as sufficient gas resources to fuel a gas plant in Mauritania with a capacity of at least 350 MW over 20 years. In June 2011, Mauritania signed a Memorandum of Understanding with mine operators (SNIM, MCM, TMLSA / Kinross then Xstrata) and SOMELEC to set up a project for the establishment of a proposed gas-fired power station and supplying the domestic grid as well as the relevant mining activities (possibly an export business, especially to the OMVS region). In its Strategic Development Framework, adopted in 2011, SNIM expects the development of sectors with a high value added, in partnership with renowned foreign companies.

The total investment volume increased by $ 1.01 billion in 2010 to $ 1.31 billion in 2011 and should reach $ 1.4 billion in 2012. These investments were oriented not only towards projects on irrigated agriculture, oil exploration and mining, but also to projects and services relating to electrical power as well as banking and telecommunications projects. After seeing its share shrink by 0.3% in 2010, the country recorded in 2012, about 8% of inflows of foreign direct investment in relation to total investment.

Despite tax and tariff reforms, the tax burden is still a barrier in the way to expand investment. The corporate taxation level is higher than that observed in economies in transition which have attracted large FDI volumes. An important legal and judicial reform has been implemented in recent years and has developed a commercial legislation and strengthened legal bodies, but there always remains the question of implementing the new regulation and the ability of the bodies to successfully enforce competition rules. Liberalization of banking sector has not been accompanied by a significant development in financial intermediation and reduced access to credit, and its high cost (23% on loans)

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continue to restrain economy. Production costs (electricity, water, transportation...) remain higher than those in the sub-region countries. The limited number of exportable products and the level of costs of production factors remained for long the main constraints on the supply of products for foreign trade. The country’s industrial and economic structure remains insufficiently diversified while export is mainly based on traditional products.

In fact, Mauritania, despite a good macroeconomic performance over the last five years with a relatively resilient economic and social framework (especially, facing a strong energy dependence and the surging foodstuffs prices, the sustained pace of growth in Mauritania had no significant effect on job creation nor on poverty reduction. Mauritania records, for more than twenty years, an average annual growth of nearly 4%, but have no social inclusion. This is due to the low diversification of the economy, the inability to create value added in the main exploited natural resources and to the weaknesses in the investment climate in the country.

**Sudan** has undertaken a number of structural economic reforms, including particularly the liberalization of the banking system and the stabilization of the macro-economic framework. These measures have helped sustain economic growth for several years. This growth was driven primarily by a strong oil production, the increase in foreign direct investment flows (FDI) and, to some extent, public investment. Thus the average annual growth rate over the last ten years is approximately 5.7%. However, the global economic crisis and lower prices on the international markets led to a slowdown in the growth rate of real GDP, which fell from nearly 7% in 2008 to 4.5% in 2009. This GDP growth fell between 2010 and 2012 from 5% to 2%. This is explained by the secession of the South of the country, reducing about 20% of its population and 75% of its oil revenues.

The separation of South Sudan in July 2011, which resulted in the loss of oil revenues and a portion of the population, largely explain these poor performances. It is also responsible for a loss of foreign currency earnings of 80% and a decrease of 35.6% of budget revenues. Austerity measures were adopted by the current Government to mitigate the economic and social crisis, but it is unable to give real results, mainly on unemployment.

It is in this context that growth drivers are sought by the Sudanese authorities. If gold can feed a lot of hope, because of the current place in export earnings, agricultural and livestock products should gain ground.

The agricultural sector, which provides over 70% of livelihood for the people of the South has been rather neglected until recently, although it accounts for nearly a third of GDP. Livestock exports have already increased by over 20% in value of USD405 million at the end of November against USD311 million in 2011, according to the Ministry of Animal Resources. And livestock breeding would represent 20% of GDP in Sudan. As for agriculture (cereals, cotton and sugar cane) which contributed to nearly one-third of GDP and employed nearly 70% in 2008, it is experiencing today a significant abandonment with archaic infrastructure.

The country should, however, face many challenges: (i) the huge regional disparities, (ii) development of infrastructures which are currently either inadequate or non-existent, (iii) the urgent need to diversify the economy, due mainly to a predictable decline in oil production, (iv) the revitalization of the rural sector, particularly of agriculture, (v) the improvement of the business climate, (vi) the high and increasing rate of youth unemployment, especially among university graduates.

**Tunisia.** The economic development of Tunisia during the last decade was characterized by an average annual growth rate of 4%. This growth rate has steadily declined since 2007 until 2011, when it knew a strong disruption (-0.7%) due to the political and social problems that the country went through.

The services sector would contribute at 42% of GDP, the industry at 22%, while the agricultural sector accounts for nearly 11% for the year 2012. Exports are slowing down due to the decrease in European demand. The average inflation rate rose from 4.4% in 2010 to 5.6% in 2012.

Agriculture recorded a high growth rate in recent years and has allowed the country to achieve a sufficient level of food security. These performances are the result of major efforts of support and modernization made in the context of development policy and regulation of agricultural and rural development.

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9 State Agency Suna. December 2012
11 Economic and social conditions in North Africa, 2011. ECA- Office for North Africa
activities. The coverage rate of national needs through domestic production is almost 48% for cereals, 100% for livestock products and 88% for cooking oil. Despite the development of other sectors of the national economy, agriculture maintains a social and economic importance; it provides around 11% of GDP and employs about one-fifth of the workforce. Tunisia is the first industrial African exporter in absolute value. The textile and food processing sectors account for 50% of the production and 60% of employment in the manufacturing industry.

Tunisia has long been presented by the international community as a model to follow, with its outstanding performance: macro-economic stability, economic competitiveness and even the achievement of some social objectives. On the macroeconomic front, the budget situation was stable; the public debt has significantly decreased over the last decade and is around 43 percent of GDP, equals to other emerging economies such as Argentina and Turkey. In terms of competitiveness, Tunisia has achieved the highest ranking in Africa, and one could say that it was generally more competitive than some European countries like the Czech Republic and Spain. The “Doing Business” indicators for 2010 also ranked Tunisia among the ten most improved economies in terms of evolution of business regulation. However, the overall ranking by the Doing Business shows that Tunisia has lost 5 positions between 2012 and 2013, going from the 45th to the 50th position with a deterioration of conditions for obtaining loans.

The main challenges which Tunisia is currently facing are: (i) reducing unemployment, (ii) containing inflation, (iii) local economic development, and (iv) the promotion of investment, which remains vital for the economy.
The following Table I gives a summary of the main economic indicators of the sub-region. It shows the difference between countries, performances, and gaps where efforts should be made in the next years.

<table>
<thead>
<tr>
<th></th>
<th>GDP (%)</th>
<th>Inflation (%)</th>
<th>Foreign exchange Reserves (Billion USD) – Importation months</th>
<th>Budget Deficit (%GDP) - 2012</th>
<th>FDI – Ranking 2013 (2012)</th>
<th>Barriers to investment</th>
<th>Dependence on cereal imports (2012) %</th>
<th>Subsidies to essential commodities - 2012 %GDP</th>
<th>Dependence on natural resources</th>
<th>Prospects / Reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Algeria</strong></td>
<td>2,5</td>
<td>4</td>
<td>8,9</td>
<td>8</td>
<td>190</td>
<td>39</td>
<td>4</td>
<td>152 (150)</td>
<td>30</td>
<td>Oil and Gas (72% of budget revenues)</td>
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<td></td>
<td>Diversification (agriculture – food processing, industry and tourism, construction)</td>
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<tr>
<td><strong>Egypt</strong></td>
<td>2</td>
<td>3</td>
<td>8,75</td>
<td>15</td>
<td>3</td>
<td>11</td>
<td>109 (110)</td>
<td>52</td>
<td>10</td>
<td>Average dependence (gas, agriculture, tourism)</td>
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<td></td>
<td>FDI / Improvement of investment climate, Recovery of the currency Revival of growth</td>
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<tr>
<td><strong>Libya</strong></td>
<td>106</td>
<td>7,5</td>
<td>8</td>
<td>5</td>
<td>Undetermined</td>
<td>Null</td>
<td>Unclassified</td>
<td>78</td>
<td></td>
<td>Diversification of the economy (Agriculture, industry,…)</td>
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<td></td>
<td>Reinforcement of infrastructures and private sector</td>
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<tr>
<td><strong>Morocco</strong></td>
<td>2,4</td>
<td>4,3</td>
<td>2,1</td>
<td>12</td>
<td>3,5</td>
<td>6</td>
<td>97 (93)</td>
<td>40</td>
<td>3</td>
<td>Average dependence (services, agriculture, tourism)</td>
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<td></td>
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<td></td>
<td>Upgrading and expansion of basic services Inclusive growth</td>
</tr>
<tr>
<td><strong>Mauritania</strong></td>
<td>4,2</td>
<td>5,3</td>
<td>2,1</td>
<td>6</td>
<td>0,6</td>
<td>3,6</td>
<td>6,1% (164)</td>
<td>90</td>
<td>4,6</td>
<td>Strong dependence on Mines (Iron, copper and gold) – 27% GDP and 52% of budget revenues</td>
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<td></td>
<td>FDI / Improvement of investment climate</td>
</tr>
<tr>
<td><strong>Sudan</strong></td>
<td>2</td>
<td>1,8</td>
<td>20</td>
<td>15</td>
<td>5</td>
<td>143 (140)</td>
<td>Obtaining loans / investors protection / delivery of building permits</td>
<td>60</td>
<td></td>
<td>Diversification of the economy Upgrading of agriculture sector FDI Bridge regional disparities Inclusive growth</td>
</tr>
<tr>
<td><strong>Tunisia</strong></td>
<td>3,6</td>
<td>4,5</td>
<td>4,4</td>
<td>5,6</td>
<td>0,52</td>
<td>3,5</td>
<td>4,8</td>
<td>50 (45)</td>
<td>64</td>
<td>Low (services, agriculture, tourism, ICT…)</td>
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<td>Recovery of an inclusive growth Containing inflation Reinforcement of investment Promotion</td>
</tr>
</tbody>
</table>
1.1.2 Social overview

1.1.2.1 At the sub-regional level

The striking event of the last few years will undoubtedly remain the revolution movement of 2011 when peoples of North Africa stood up against the lack of democracy, social inequality, unemployment, particularly among young people, and the lack of economic perspectives. These revolts led to the coming of new governments and democratically elected parliaments in Egypt, Tunisia, Libya and Morocco. The new authorities in these countries are now trying to meet the expectations of their people in a very difficult global economic environment.

The unemployment rate in the region is one of the highest in the world, with an increase from 9.6% in 2011 to 10.9% in 2012\(^2\). For comparison, the global unemployment rate is around 6% of the workforce. For 2013, this upward trend is expected to continue, despite a forecast of the growth resumption in the sub-region. This spectacular rate is primarily the result of youth unemployment, which remains high. Indeed, 90% of the unemployed are between 15 and 29 years old, and the unemployment rate for this age group was estimated at 27.1% in 2011. For comparison, the global unemployment rate for young people in the same age group was 12.7% for the year 2011. Finally, this unemployment particularly affects young graduates.

The situation of women in the countries of the sub-region is even more worrying as the overall unemployment rate for the region in 2011 was 19.0% for women against 8.7% for men. Moreover, unemployment rate for young women is estimated at over 40% and the number of active women at 28%, which is very low compared to other regions in the world.

In its 2012 report, the ILO points out that employment in this sub-region is characterized by an increase in “vulnerable employment” rooted in the informal sector. These jobs are generally governed by informal arrangements that deprive workers from social protection and are characterized by low pay and poor working conditions which may adversely affect the fundamental rights of workers.

The countries of North Africa have made significant progress in achieving the Millennium Development Goals, particularly in the areas of health, access to water or the fight against poverty. Some countries (Algeria, Egypt, Libya, Morocco and Tunisia) are likely to achieve the MDGs in 2015. However, these performances hide significant geographical inequalities (poverty rates ranging from 42% in Mauritania to less than 1% in Algeria). The HDI\(^13\) ranges from 0.795 for Libya (64\(^{th}\) worldwide) to 0.402 for Sudan (169\(^{th}\)).

1.1.2.2 Social overview by country

**Algeria** has made significant efforts in terms of investment in the framework of its 2010-14 program for an amount of USD 286 billion. Nearly 40% of this amount is allocated to human development and focuses on schools, health facilities and improving access to drinking water. In 2011, social spending reached USD 17.2 billion, with USD 3.14 billion, be it 2.7% of GDP, in the field of public health\(^14\).

The country has made significant progress towards achieving the Millennium Development Goals (MDGs). The proportion of the population living in extreme poverty was estimated at 0.5% in 2009 against 1.9% in 1988. The poverty rate has meanwhile decreased from 14% in 1995 to 5% in 2009\(^{15}\). The population’s access to basic services (water, electricity, education and health) has been improved. However, issues related to access to housing and unemployment, the rate of which is estimated at 10% in 2012 (27% for young people under 30 years old), remain major concerns. The unemployment rate is much higher for women (18%) than men (8%). To accelerate the reduction of unemployment, the Algerian Government has introduced on the 2012 budget\(^16\) an allocation of USD 2.4 billion for job creation by microenterprises and for professional integration.

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13 UNDP. 2012
In terms of Gender and gender equity, Algeria has made significant progress, including the review of the Constitution in November 2008 to enhance women’s access to decision-making. However, the country is still lagging behind in this area, since the proportion of women in the major centers of power is about 7%.

**Egypt** has made considerable progress in reducing extreme poverty and in access to basic social services. However, poverty has increased rather. It affects 44.3% of those aged between 18 to 29. According to estimates of the African Economic Outlook (2012), 23% of Egyptians live in slums, where the population growth rate stand at 3.2% against 1% outside the slums. The poverty rate is higher in rural areas. Indeed, Upper Egypt is home to more than 51% of low-wage earners, 44% of which are between the ages of 18 to 29.

Child labor continues to be a concern despite its prohibition. Unemployment, especially among young people, was one of the main subjects of discontent of protesters during the revolution. With more than 750,000 new entrants in the labor market each year, the unemployment rate rose from 8.7% in 2008 to a projected rate of over 13% in 2012.

The gender issue remains a challenge for Egypt. Women are marginalized because of economic, social and political obstacles. They are the most vulnerable group in the labor market because they work mainly in the informal sector or as unpaid family workers. Their share in non-agricultural wage employment is very low. It is also difficult to ensure the implementation of measures to promote gender equality in the current climate of transition. However, Egypt has succeeded in eliminating the disparities between girls and boys in secondary education. In 2009/2010, the official unemployment rate stood at 22.2% among women and only 5% among men. However, although the professional and technical workforce is made of 30% of women, they accounted only for 9% of administrators and managers in Egypt in 2007. The illiteracy rate is about 30%. It is higher among women, especially in rural areas.

Public spending on education accounted for nearly 3.8% of GDP, which is the lowest of all the countries of North Africa. Furthermore, the progress made by the country towards the MDG related to primary education for all may well be insufficient given the high educational wastage rates. According to the 2010 edition of the Human Development Report of Egypt, 27% of young people between the ages of 18 to 29 do not complete primary education (17% do not finish their education and 10% have never been to school). Public education is reportedly of poor quality and does not meet the needs of the labor market.

Egypt, the world's largest wheat importer, is in a deplorable financial situation, which makes difficult its actual purchases to the point that some experts fear food riots. This country, the most populous of Arab countries, has long subsidized bread in a country where a quarter of the 83 million inhabitants lives below the poverty line. This subsidy program costs the country, each year, $ 2.5 billion, according to the U.S. Department of Agriculture. The consumption of wheat is one of the highest in the world. According to FAO, it is estimated at about 145 kg per capita per year (against 81 kg for an American). Over the past decade, this consumption has increased by almost 40% and the country should now import more than half of its wheat needs.

**Libya** recorded until the recent revolution very favorable social indicators compared to other countries of the sub-region. Poverty is very low and extreme poverty is nonexistent given the particularly high annuity from hydrocarbons. The Human Development Index (HDI) is the highest in Africa. It rises to 0.795, making the country the 64th out of 187 countries ranked in 2012. However, Libya displays strong social inequalities; high levels of youth unemployment and large regional disparities.

The unemployment rate is one of the highest in the Maghreb region, about 30% (in 2009), just behind Mauritania. In addition, an estimated rate of 28% of Libyan families has no stable income. The agricultural sector employs 17% of workers.

The adult illiteracy rate is higher among women (16.9%) than among men (6.27%), but the school enrollment ratio is now the same for boys and girls, be it a nearly perfect equality in the primary school (with an enrollment ratio of over 100%) and particularly higher rate in the secondary school (120%). However, due to certain social considerations, women do not fully participate in the labor market.

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business and politics. Women’s access to finance is not limited by legal constraints, but rather by a historical heritage and cultural considerations. The main obstacles are the lack of their participation in public life and their lack of economic autonomy.

Libya has heavily invested in providing access to education, as evidenced by the high levels of enrollment and literacy, but it was less successful in enhancing the quality of education, which creates an inadequacy between the needs of the labor market and the degree programs.

**Morocco** is ranked at 130th position (out of 187 countries) with an HDI of 0.606. Regarding MDGs, some goals may not be achieved by 2015, such as the one relating to Men-Women equalities. Yet in the field of promoting gender equality, the Moroccan government is working on many projects (establishment of a gender parity authority, enforcement of the Family Code, the fight against all forms of discrimination, strengthening the rights of Moroccan women …). It seems that the means of implementation of these policies and the awareness campaigns for the rights of women are inadequate and explain the delays that Morocco still shows in relation to this specific topic.

Despite the crisis, the unemployment rate fell from 9.8% to 9.1% between 2007 and 2012, but remains high among young people aged 15 to 24 (18.3% in 2009) and the university graduates (26.8%). Urban areas are particularly affected, since 31.8% of 15-24 years, 20.2% of 25-34 years and 20.3% of women are unemployed. Despite the annual creation of 156,000 employment positions, the average economic growth rate (4.7%), recorded over the last decade, remains insufficient to absorb the arrival of new graduates in the labor market. In order to influence the trend, the Moroccan government has undertaken a number of measures to better integrate young unemployed and boost entrepreneurship.

According to Moroccan authorities, unemployment reflects the inadequacy of the educational system to the labor market, characterized by the low share of science and technology disciplines. To this end, the Government initiated, through the National Education Emergency Plan (PUEN), a broad discussion on the problem of fluidity of the labor market and the role of the private sector in terms of intermediation on this market. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), the net primary enrollment rate for 2011 currently stands at 96% at the national level (95% for girls). Despite these efforts illiteracy still affects certain segments of society, including people of more than 45 years.

The national strategic framework for poverty reduction aims at supporting and improving the purchase power of the poorest categories through the creation of income-generating activities and social measures such as the National Initiative for Human Development (NIHD) and the medical assistance plan for the economically disadvantaged (RAMED). Other measures include compensation for the increase of raw materials prices (cereals, sugar and petroleum products), the development of microcredit, the reduction of income tax, as well as the strengthening of basic health coverage for the poorest. In 2011, civil servants received a net salary increase of 600 MAD.

The latest study of the High Commission for Planning (HCP) on “Le Maroc des Régions”, published in 2010, shows an increase in regional inequalities in recent years, particularly in economic terms. Five regions (out of sixteen) contribute alone with more than 60% of GNP and represent 57% of national consumption. The HCP survey shows that 10% of the richest population have an income 17 times higher than that of the poorest 10%.

**Mauritania** joined the Millennium Development Declaration in 2000 and includes its goals in its policies and development programs, particularly in its CSLP-3 (Strategic Framework for Poverty Reduction, 3rd generation, 2011-2015) adopted in October 2010. In fact, Mauritania has already achieved a number of MDGs relating to: (i) universal primary education (Goal 2); (ii) gender equality in primary education (item of goal 3); (iii) access to drinking water (item of goal 7). Current trends suggest that Mauritania would be able to make a considerable progress towards achievement of the goal 6, by controlling major diseases such as HIV/AIDS, malaria and tuberculosis. Despite these advances, the situation remains precarious in the health area. The country suffers from structural weakness in terms of medical coverage, service quality and efficiency of health spending.

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20 HDI, 2012, UNDP
21 Moroccan currency unit, Moroccan Dirham
Universal access to health care is about 67% at the national level (within 5 km radius). However, there are significant disparities between rural and urban areas, and between rich and poor. The poorest departments have a rate of 9% (Barkéol) and of 15% (Mbout) while in the capital city, Nouakchott, the rate is 98%. The rate of births attended by healthcare personnel is 90% in urban areas, against only 30% in rural areas. This rate is 95% for the richest 20%, while it is only 21% for the poorest 20%.

Mauritania continues to face rising prices of essential commodities, leading the government to establish a National Solidarity Program (NSP) in 2011 and a contingency program EMEL in 2012. The year 2012 was a year of severe food crisis with a rainfall deficit and a real threat to livestock. In 2012, the World Food Program noted that more than 600,000 people were food insecure, be it 17% of the national population. According to national statistics, the overall level of unemployment is estimated in 2008 at 31.2%, slightly lower than in 2004 (32.5%). The analysis of unemployment by age indicates that it is a phenomenon that largely affects young people of 15 to 24 years. Unemployment of young people stood in 2008, around 67% of young women and 44% for young men. In urban areas, it affected 50.8% of young boys and 69.0% of young girls.

The pace of sustainable job creation still fails to follow the rate of population growth. Faced with this general observation, Mauritania has implemented many youth programs and insertion instruments from the programs of the Commission in charge of Insertion, CDHLCPI, to the more recent creation of the National Agency for Youth Employment, ANAPEJ, through all the vocational training instruments. A recent evaluation of these policies concluded that all these efforts have resulted only in a sustainable insertion in labor market of 12,600 unemployed young people over 15 years.

In terms of political representation of women, an important step was taken in favor of the adoption in July 2006 of an organic law on the promotion of women's involvement in decision-making. The law requires a minimum 20% quota for women's representation on each municipal and legislative list. The proportion of seats held by women in Parliament has then reached 18% in 2007, against 0% in 1992 and 4% in 2003. It is in the municipal councils that progress has been the most important: 30% of municipal councilors are now women. During the 1980s, there were at the most one woman minister, often responsible for “women’s affairs.” Over the past two decades and as circumstances changed, the number was increased to 3 or 4 women out of 25 or 26 members of the government, be it an average rate of about 15%. Moreover, since 2007, the command positions (governor, wilaya prefect) and diplomacy (Ambassador) were, for the first time, open to women.

### Sudan

Performance in the social sector has been severely affected by the civil war and the arising governance issues. The robust economic growth of the last decade has not been sufficiently inclusive to have a net positive impact on poverty. This latter is estimated at the rate of 46.5% (2009) at the national level, but with a strong presence in rural areas (57.6%) compared to urban areas (26.5%). The devolution of responsibility for social services to the Federated States has led to the deterioration of services at the local level, due to the lack of institutional and human capacities, as well as adequate funding.

Regional disparities prevail at almost all of the Millennium Development Goals (MDGs), such as food insecurity, access to basic health services, water and sanitation. Conflicts engaged on three fronts (East, West and South) and the internal displacement of civilians have resulted in food insecurity in some parts of the country, and continue to cause suffering and heavy loss of human lives. Poverty is particularly high in the southern and western states. Huge disparities exist in development between the North and the South, with regional precarious situation in the border States such as Southern Kordofan, Blue Nile, Abyei and the Red Sea. The discrimination against women with respect to wages, employment and decision-making are major concerns brought by civil society and regularly denounced by technical and financial partners of the country.

### Tunisia

has experienced over the last twenty years a significant reduction of poverty and an improvement of social indicators. The Human Development Index (HDI) of the United Nations stood at 0.712 in 2012, placing Tunisia in the 94th worldwide position out of 187 countries and in the second place in the sub-region after Libya. Between 1990 and 2010, the State spent each year on average 2% of GDP on health (3% in 2010), and 6.3% on education (7.2% in 2010). The Millennium Development Goals

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23 Conducted by the University of Nouakchott in collaboration with the University of Gaston-Berger de St-Louis, 2013
(MDGs) should be achieved by 2015, with the exception of the target 16, which deals with the creation of jobs for young people.

The average growth rate of around 4 to 5%, shown in recent years has failed to absorb the inequalities between social categories and between different regions. The poverty rate of around 3%, before the revolution, was found to be more important and even exceed 20% in some areas. Unemployment is rising in recent years. In 2011, it stood at 18.9% of active people, be it 738,000 of unemployed people. It fell by 2.2% in 2012, be it the rate of 16.7%. With seven unemployed persons out of ten aged under 30 years, unemployment among young people, especially graduates of higher education, was already a major issue before the revolution. Employment incentive programs exist mostly in the form of financial inducements to hire youth and training programs to which was added in 2011 a new emergency program. Women experienced in 2012, a record unemployment rate of nearly 28% (against a rate of 15.4% for men). This figure is considered among the highest in the world since the global average is of 6.5%. The rate of female employment is only 24.9% against 70.1% for men. The National Employment Strategy (2014-2017) reveals a significant increase in unemployment among young women graduates of higher education: 49.4% in February 2012 against only 21% of boys of the same qualifications. This strategy aims to reduce the unemployment rate to 8% after four years of implementation. It indicates that the Tunisian Government has succeeded in creating in 2012 nearly 100,000 jobs while over the period 2000-2010, the annual average was 60,000. In 2013, the Tunisian government is targeting the creation of 140,000 jobs.

After more than fifty years of independence, social groups and entire regions have been relatively marginalized of the process of development that Tunisia has experienced in its entirety. It is in this context that the new Sustainable Development Strategy (2012-2016) proposes two strategic priorities: (i) Strengthening the social equity among all segments of society and (ii) Consolidating the competitiveness of regions and strengthening solidarity and complementarily between them.

The following Table 2 summarizes the main social indicators examined at the level of the countries of the sub-region.

**Table 2. Main social indicators**

<table>
<thead>
<tr>
<th>Country</th>
<th>Unemployment rate - 2012 (%)</th>
<th>Poverty rate - 2012 (%)</th>
<th>HDI – 2012 - ranking</th>
<th>Health expenditures (% GDP) - 2010</th>
<th>Education expenditures (% GDP) - 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>10</td>
<td>5</td>
<td>0.713 (High) – 93rd</td>
<td>3</td>
<td>4.6</td>
</tr>
<tr>
<td>Egypt</td>
<td>13</td>
<td>26</td>
<td>0.662 (average) – 130th</td>
<td>2.4</td>
<td>3.8</td>
</tr>
<tr>
<td>Libya</td>
<td>30</td>
<td>&lt; 1</td>
<td>0.769 (high) – 64th</td>
<td>1.9</td>
<td>ND</td>
</tr>
<tr>
<td>Morocco</td>
<td>9</td>
<td>28</td>
<td>0.591 (average) – 130th</td>
<td>1.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Mauritania</td>
<td>31,2</td>
<td>42</td>
<td>0.467 (low) -</td>
<td>1.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Sudan</td>
<td>13</td>
<td>46.6</td>
<td>0.414 (low) – 171th</td>
<td>1.3</td>
<td>6</td>
</tr>
<tr>
<td>Tunisia</td>
<td>16</td>
<td>18</td>
<td>0.712 (high) – 94th</td>
<td>3</td>
<td>6.3</td>
</tr>
</tbody>
</table>

1.1.3 Environmental review

1.1.3.1 At the sub-regional level

Given the importance but also the similarity of certain problems related to the environment in the countries of North Africa (desertification, water scarcity, degradation of land, forests and grazing or even the marine environment, climate change, industrial, urban and agricultural pollution ...), taking them into account across the whole region becomes a critical issue. The commitment of all countries in

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24 Program of assistance to the Development of under-privileged Zones, 2011. ILO/AFD
the sub-region to implement the provisions of the various multilateral agreements and instruments on environment reflects the importance and urgency of these issues. Despite these similarities, and also the willingness, at the level of the different countries, to achieve the regional integration as a means for the protection of the environment, it still do not exist, at the sub-regional level, coordination instruments of environmental policies.

AMU, which includes only 5 of the 7 countries of the sub-region, established, however, since 1992, a Maghreb Charter on environmental protection and sustainable development. This charter, which defines the general guidelines in key areas, remains, however, barely operational and insufficiently integrated within the national public policies of each country.

The rapid increase of energy demand (6 to 8% per year), exhaustion of fossil energy sources, and the implications of the sustainable development agenda in reducing carbon emissions, set the energy issue at the center of environmental challenges in the sub-region. Some regional initiatives such as the Mediterranean Solar Plan (MSP) and Desertec Industrial Initiative (DII), contribute to the dynamics of renewable energy's large-scale development, particularly in Morocco, Egypt, Tunisia, and Algeria. These countries have also signed bilateral cooperation agreements with Northern countries (USA, France, Germany, Spain ...) and emerging countries (Brazil, China). Such initiatives represent real opportunities for expanding access to energy and investment in the sub-region but also for unemployment absorption and a successful regional integration. However, many voices are being raised within the UMA to request the launching of a sub-regional reflection on the coordination of actions in the framework of a Maghreb strategy for developing renewable energies. Among the urgent discussed actions are: (i) the gradual harmonization of regulations and laws of networks, (ii) the formulation of a regional strategy for capacity building and knowledge transfer, (iii) the acceleration of the formulation process of a Maghreb strategy of RE that promotes the emergence of regional industrial centers, (iv) the development of unifying regional programs, particularly in the field of scientific research dedicated to renewable energies.

North Africa is characterized by a water deficit of the highest in the world (water availability less than 1000 m³/year), desertification that affects about 85% of the land, which are increasingly threatened by erosion and salinization, rainfed agriculture very sensitive to climate variations, and a concentration of population and economic activities increasingly important in coastal areas). All these factors make that this sub-region has been described by the IPCC as one of the most sensitive regions to climate change. The World Bank published in 2011 a study on climate change adaptation and resilience to natural disasters in the North African coastal cities. This study, which focuses on three cities, Alexandria, Casablanca and Tunis, and on the valley of Bouregreg in Morocco located on the edge of Rabat, establishes a baseline case of these four sites and makes projections for 2030 in terms of exposure to natural disasters, extreme weather events and the influence of climate changes on them. It assesses the risks and costs of potential losses and proposes reforms to be implemented and investments to be made to enable cities to protect their populations. The study predicts a rise in sea level due to climate change of 20 cm in 2030 in Morocco, Tunisia and Egypt, with much more violent rainstorms. Tunis is presented as the city the most exposed to the risk of soil instability and marine submersions as well as floods and high to very high coastal erosion. Casablanca is primarily concerned with coastal erosion and flooding, Alexandria by marine flooding, water shortages and coastal erosion. Finally, potential risks are identified in the Bouregreg valley in terms of marine submersion and floods. The General Circulation Models (GCMs) indicate a probable warming of the sub-region by 2°C to 4°C during the 21st century, especially with more than 1°C warming between 2000 and 2020. In practice, many of the adaptation projects are concentrated in Morocco, Libya and Egypt. These projects mainly concern water resources, agriculture and early warning systems. In terms of mitigation, most projects are carried out in Morocco, Tunisia and Egypt. They target mostly the field of renewable energies and the reduction of GHG emissions for a number of activities.

26 CO2 average emissions for the sub-region, calculated over the last 30 years, are about 2.1 metric tonnes/inhabitant. They are very differentiated by country and vary to a maximum of 8M Mt/inhab for Libya to 0.2 Mt/inhab for Sudan
27 International Energy Forum, Rabat, September 2012
28 Intergovernmental Panel on Climate Change (IPCC)
The cost of environmental degradation varies between 2 and 5% of GDP\(^29\) for the four countries: Algeria, Egypt, Morocco and Tunisia, while it is estimated at nearly 17% of GDP for Mauritania\(^30\). Based on this criterion, Tunisia has the best performance. The estimated cost in Mauritania, although significantly higher than the other countries, is similar to the figures registered by the Sahelian countries like Mali, Senegal, or Burkina Faso.

The severity of these environmental issues by country and the lack of coordination at the sub-regional level bring about an environmental governance performance limited and especially very differentiated by country. The Environmental Performance Index (EPI, 2012)\(^31\) developed by the World Economic Forum and Yale University, ranks Egypt in the 60th position, Algeria in the 86th, Tunisia (99th), Sudan (104th), Morocco in the 105th position while Libya arrives in the 123rd position out of 132 listed countries. Mauritania has not been part of the recent ranking due to the lack of data. However, the country has been characterized so far by low performance in environmental governance, as it was ranked in 2010 in the 161st position out of 163 listed countries (EPI, 2010). All countries except Libya and Sudan have signed and ratified the Kyoto Protocol, and have already produced and submitted their first and second national communications.

Health problems related to pollution, especially in urban and industrial areas, constitute another challenge. The causes include municipal open landfills, the use of leaded petrol to power an obsolete and inadequately maintained fleet of cars, inefficient use of fossil fuels for energy production and particulates and sulfur dioxide emissions by the industry. Dangerous waste and persistent organic pollutants (POPs,) such as residues of obsolete pesticides, are imminent problems in the region. Setting environmental standards of companies is still very insufficient. Important, but limited progress has been made, particularly in Tunisia, Morocco, Algeria and Egypt. These standards are primarily related to effluent waste, to air pollution (ambient air, industries such as cement ...) or to marine pollution. Other countries are far behind in this area.

Environmental governance continues to be affected by the low level of regional integration. Common major issues and shared resources are managed at the level of each country without consultation or coordination of implemented policies. In the field of water resources, North Africa has six transboundary river basins which cover about 242,000 km\(^2\) and on which approximately 7.1 million people depend. None of these river basins is governed by an international/bilateral treaty. The management frameworks of shared water resources differ according to the countries involved. Surface waters shared between Morocco and Algeria on the one hand, and Algeria and Tunisia, on the other hand, are estimated at around 850 million m\(^3\) flowing from Algeria to Morocco, and at the same volume from Morocco to Algeria. These shared waters have so far not been the subject of agreements for distribution among the three countries. However, formal partnerships exist in the form of the establishment of joint technical committees to exchange information and experiences on the mobilization and management of water resources in frontier basins. Management of Senegal river waters, main water resource of Mauritania is the responsibility of the Office for the Development of the Senegal River (OMVS) which is an organization comprising the countries that share the waters of the Senegal River.

In the areas of oil and energy research and exploration, Mauritania and Algeria have just signed in March 2013 an important strategic partnership agreement which plans to extend to Mauritania the Algerian experience in terms of renewable energy and technical and technological progress in terms of oil exploration and exploitation.

In conclusion, it now seems clear that the strengthening of regional integration remains an important tool for sustainable management of natural resources, under high pressure, of this region and provides effective collective answers to the challenges of the sustainable development of the entire sub-region.

\(^{29}\) MED Report 2012. Program on the sustainable development in Mediterranean zone. World Bank et GEF
\(^{30}\) It is to mention, however, that calculation method is different in Mauritania.
\(^{31}\) The environmental performance indicator (EPI) is a mixed indicator designed to assess, compare and improve the efficiency of environmental policies. It has been used for the first time in January 2006 by researchers from the American universities of Yale and Columbia.
1.1.3.2 Overview by country

Algeria. The challenges that the country must face with regards to environment are numerous: (i) an excessive concentration of the population on the coastal fringes leading to strong tensions in the use of the soils and water resources and an urbanization difficult to manage; (ii) an economic activity dominated by the exploitation of unsustainable resources (gas and oil); (iii) the persistence of the drought in some areas, which involves a decline of the availability of natural resources to the detriment of food self-sufficiency; and (iv) vulnerability to climate change.

To face these challenges and to promote a sustainable development, the authorities set up the National Action plan for Environment and Sustainable Development, in the fields of environmental education, energy resources, preserving of water resources, safeguarding of the ecosystems, rural development, improvement of life conditions and health of the citizens, industrial depollution, and protection of the archaeological, historical and cultural heritage. Within the framework of the implementation of this plan, a legislative instrument intended to integrate environmental protection in the public policies was set up. Thanks to these various measures, many results can be witnessed with regards to environmental governance. These efforts led to good environmental performances translated by the classification EPI (2012) and by the strong likelihood for this country to reach all the targets of the MDG 7 by 2015.

The intensification of mass transport, which is a hydrocarbon-consuming sector, is one of the major sources of atmospheric pollution and greenhouse gas emissions. This concern was integrated in the Algerian policy for environmental protection, based on the adoption of a sustainable method of social and economic development. Algeria encourages the use of less polluting fuels: LPG, unleaded gas and Compressed Natural Gas (CNG), for a reduction in air pollution. The unleaded gas has been produced for 15 years in the refinery of Skikda. Sonatrach has recently prepared a vast program of modernization and increase in unleaded gas production capacities to less than 50 particles per million (ppm) sulfur (international standard). This program also deals with the reinforcement of the use of the LPG/C (containing hydrocarbon LPG) and the introduction of the use of compressed natural gas (CNG). As of the end 2013, the fuels compatible with the standard “Euro 4” will be available all over the national territory.

In order to lighten the risks related to climate change, the Government set up a pilot project aiming at reducing CO₂ and GHG emissions in general. A national plan of reforestation, which deals with the fight against erosion and the protection of basins, was also launched in 2009. Algeria has invested nearly 100 million dollars on equities, in the field of attenuation of GHG emissions while sequestering an amount of carbon in the geological structures in Ain Salah (South of Algeria).

Industrial depollution is another important axis of the Algerian policy. It allowed, in 2011, the elimination of cyanides from 13 industrial companies distributed over 10 Wilayas. Moreover, instruments of environmental management have been set up, especially within the framework of the prevention policy against industrial pollution, and many contracts of performance have been signed with companies within the framework of the adoption of cleaner production mechanisms.

To reduce energy dependence on unsustainable sources, the Government set up, in 2011, a Body for renewable energies, in charge of coordinating the national efforts in the matter, and intends to develop the integration of solar energy in the energy mix of the country. Within this framework, it has created special funds (Development funds for renewable energies) supplied with the oil taxes, and intended to finance the actions and projects relevant to renewable energies (in 2011, 1% of the oil royalty was allocated to these actions). Thanks to its privileged location, Algeria has the largest solar field of the Mediterranean basin. The total of received solar energy is estimated at 169,400 TWh/p.a., that is to say, 5,000 times the annual electricity consumption of the country. A long-term plan for renewable energies and energy efficiency has been adopted with the objective of 22,000 MW. 12,000 MW of which is to cover domestic demand, and 10,000 MW can then be exported, if long-term purchase orders and external financings are guaranteed. This program includes the building, by 2020, of about sixty photovoltaic solar and thermal plants, wind farms and hybrid power plants. The Hassi-R’mel hybrid power plant (15 MW) is the first completed project of renewable energies which combines solar and gas resources.
These policies are backed with the new ecological taxation based on the “polluter pays” principle, in order to encourage more environmentally-friendly practices. Therefore, we can list several instruments such as the taxation of industrial waste water, polluting activities or atmospheric pollution. These taxes are transferred to the national fund for the environment and depollution. Indeed, the national fund for environment and depollution ensures, since its establishment, the financing of assistance provided for modernization projects of the existing plants into clean technologies.

**Egypt.** The environmental issues are treated in accordance with the priorities identified by the national action plan for the environment 2002-17. This plan aims at an economic and social inclusive development, and recognizes the links between sustainable development, agriculture, environmental protection, food safety and reduction of poverty. It defines a number of strategic directions with regard to major issues, such as: waste management, water quality, air quality, elimination of industrial pollution, instruments of environment protection, training and awareness-raising about environmental issues and decentralization of the administration in charge of the environment. The issues of waste and pollution remain the most important and up to now, there are no regulations specific to waste. Egypt produces at the present time more than 21 million tons of waste per annum, about half (48%) of which comes from the Capital city. Approximately 65% of this waste is collected and managed more or less effectively by the State and private operators. The remaining accumulates in the streets and conurbations.

In spite of the rise in environmental investments and targeted public policies, progress in setting up a sustainable environment is still slow. The strong demographic growth weighs heavily on the country’s natural resources, especially with regard to water resources management. A national water management plan is now being prepared. Taking into account its considerable potential in renewable energies, the country has established an energy strategy that was adopted by the Supreme council for Energy in February 2008, with the objective of producing 20% of electricity from renewable sources, by 2020. The five-year plan (2012-17) for the extension of thermal plants and construction of solar power plants aims at positioning Egypt as a main producer of solar energy in North Africa.

Agriculture, which is a key sector of the Egyptian economy, is threatened more and more by climate change. Cycles of droughts and floods have caused progressive reduction of agricultural surfaces. These reductions have been estimated at 15% over the past twenty years.

Egypt is far behind with regards to access to sanitation in rural areas. In spite of the fact that 90% of rural areas have access to drinking water, rural sanitation did not exceed 30% in 2011. However, thanks to the support of the World Bank, Egypt will make important progress in this field by 2015, in order to achieve complete coverage by 2030. With regards to the achievement of the MDGs, we can notice that: (i) the percentage of protected areas was 6.1% of the national territory in 2009, against 4.4% in 2000. By 2017, Egypt intends to increase this percentage to 17% of the national surface; (ii) Egypt succeeded, between 2000 and 2010, in reducing, by more than 70%, its consumption of Ozone-depleting Substances (MDG, 2012); (iii) in 2010, the proportion of the urban population having access to a source of improved water was estimated at 98% (MDG, 2012, report for Africa).

These performances show that the various targets of the OMG 7 can be achieved by 2015.

**Libya.** The desert occupies 90% of the national territory. The 2,770 km Mediterranean coast gathers 90% of the population. Several environment-related problems are today at stake in this country, such as deforestation, decrease in water reserves, huge waste discharge, use of non-renewable energy sources, or sustainable management of the coastline. Libya is confronted with serious difficulties in the management of its natural resources in spite of the promulgation of environment protection laws in the 1990s, as well as the ratification of many international conventions. One of the main issues is the depletion of groundwater because of excessive use in agricultural activities, which involves a salinisation of the groundwater and sea-water infiltration into the coastal aquifers. The lack of priority to protection of biodiversity, housing and air pollution will cause long-term effects on the ecosystem of the country.

The main difficulty lies in the absence of instruments of environmental governance. The awakening of the authorities was very late. The first strategy recognizing the importance of environmental protection goes back to 2002. It was primarily directed towards marine pollution in particular. Libya started to

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32 Noureldine Mohamed, University Professor. Interview with Al-Ahram Newspaper, April 2013.
conceive a sustainable development program in collaboration with the UNDP in 2008; which programs have been stopped with the protest movements in 2011. At the time being, these dynamics have not yet resumed. Moreover, the priorities set by the Government in 2012 do not really tackle the environment-related issues.

The challenges of sustainable development lay also in a serious contrast between, on the one hand, a GDP of almost USD 60 billion, an annual growth rate of more than 7%, a GDP per capita exceeding USD 14 thousand and, on the other hand, an unemployment rate of more than 15% and an agriculture activity occupying only 2.1% of GDP. The environmental performances of Libya remain limited, which will strongly hinder the country from achieving the MDG 7. Libya is the country of the sub-region which has the strongest water stress. The index of exploitation of water resources, which represents the share of water used to cover the needs of a country compared to the average annual volume of natural contributions, is estimated at more than 100%.

Other important environmental problems are: (i) water pollution in the coastal area, resulting from the combined impact of waste water, oil derivatives and industrial waste; (ii) insufficient treatment of waste water because of breakdowns in pumping stations and purification plants; absence of sanitation networks in some areas; (iii) insufficient management of urban solid waste and absence of landfill sites; (iv) the absence of a convenient control and legal environmental standards for the industrial sector, especially those intended for the high number of small industries located within the urban centers.

Libya has considered reducing its dependence on polluting fossil energies and developing its potential in renewable energies. The Libyan government has just announced, at the “Dubai International for energy. April 2013” conference, that it will achieve in 2025, 10% of clean and sustainable energy in its production of electricity. The plan, adopted by the Libyan government envisages the launching of several projects in the field of renewable energies - wind and solar power – by 2014, which is a priority of the project of wind energy generation in the east of Libya.

**Morocco.** The strategic direction of Morocco for environmental protection in the medium and long terms comprises a number of federator programs. These later particularly relate to the protection and sustainable management of water resources, soil resources, protection of the air and the promotion of energy efficiency and renewable energies, the protection and the sustainable management of the natural environments, particularly, forests, oases and coasts, prevention of natural disasters and major technological risks, improvement of urban and suburban environment, and communication. Morocco adopted in 2012 a national charter for the environment and sustainable development and a framework law aiming at consolidating the assets and harmonizing the implemented policies and programs. Thanks to this legislative framework, Morocco has today an integrated and constraining instrument for a better management of the environment and sustainable development. This charter determines the duties and the individual and collective responsibilities in all the branches of industry. Lastly, the charter gathers all actions and initiatives aiming at achieving the MDGs.

The water resources are estimated at some 21 billion m³/p.a., and agriculture absorbs 80% of national consumption. Water becomes increasingly rare and of less quality. The drought, especially in the Middle areas and in the South, places Morocco among the countries threatened by the hydric stress (table 3). The decrease in water quality and quantity threaten not only health, food and the fight against poverty in rural areas, but also the agricultural strategy of the government on the long-term. The 2010-2030 Action plan related to the strategy of water, aims at developing the hydraulic infrastructures and the reforestation of more than one million and half hectares, in order to fight against soils erosion and desertification. These actions are backed by the installation of an early-warning system for drought which made it possible to draw up a cartography of vulnerability and to establish monitoring indicators. A solution was found through the plantation of 3.9 million palm trees by 2030.

Morocco shows an important delay in terms of sanitation, especially in rural environment, where 32% of the households use an autonomous system and less than 2% are connected to a network of liquid sanitation. The urban centres are partially covered by networks of sanitation which are often decayed and saturated, with an insufficiency of purification involving the degradation of water quality and the appearance of hydrous diseases.

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In order to tackle the challenge of climate change, and after having worked out its 1st and 2nd communication, Morocco has defined a National Fight Plan Against Climate Warming (PNLCRC) as well as a territorial approach in this field. The strategy of Morocco in the fight against climate change is based on the implementation of a mitigation plan of the emissions of GHG and on the anticipation of an adaptation policy to face the vulnerability of its territory and its economy vis-a-vis climate change. These two strategic axes are the basis of the PNLCRC. The strategies of development of renewable energies and energy efficiency, as well as the development of CDM projects (Clean Development Mechanism), are part of the mitigation plan of GHG emissions.

Morocco has just launched a reflection process around the topic of food and medical security vis-a-vis climate change. This reflection made it possible to put forward the main vulnerabilities of the Moroccan food and medical system vis-a-vis climate change, and to analyze the options of reforms necessary to hold a better synergy between the system of governance of climate change and food and medical security in Morocco.

Morocco has an important potential of renewable energies, whose development constituted, these last years, an important axis of the energy policy of the country. For five years, Morocco has launched important projects in this field: solar and wind plans of 2,000 MW each. These projects will make it possible to avoid, on the long term, the emissions of respectively 3.7 million tons of CO2 per annum and 5.6 million tons of CO2 per annum. These plans take benefit from an institutional support and a favorable regulation framework. Several laws underlie the implementation of this new vision: (i) The law on renewable energies (known as law No. 13-09), which regulates the conditions of production and marketing, and organizes competition in this sector; (ii) The law establishing the “Moroccan Agency For Solar Energy”, supports the operational implementation of the Moroccan Solar Plan of 2,000 MW within the framework of a public-private partnership; (iii) The law No. 47-09 relating to energy efficiency, which was promulgated in 2011. A strategy for energy efficiency is being prepared.

Morocco also transformed the Development Centre for Renewable Energies into the Development Agency for Renewable Energies and Energy Efficiency (ADEREE). The latter is in charge of controlling all policies of promotion and development of renewable energies and energy efficiency, selecting sites for development of renewable energies and mobilizing financing instruments and means to carry out these programs.

In order to deal with all these themes within the framework of an integrated strategic vision, Morocco has recently launched a project of elaboration of a national strategy for sustainable development, which objective is, on the one hand, to ensure balance between the needs of socio-economic development and sustainability of natural resources and, on the other hand, to improve the living condition of the populations.

Mauritania is geographically divided into four zones: (i) mining and pastoral north, (ii) agropastoral south-east, (iii) the settled and agrarian valley of the Senegal river and, (iv) the wide and rich coast, favorable to fishing activities. The environmental situation of Mauritania is typical to sahelo-saharan areas of Africa. It remains characterized by a very fluctuating and overall overdrawn rainfall mode, massive deforestations for natural and anthropic reasons, the laying bare of the biophysics screens involving acceleration of wind and hydrous erosions and on ¾ of the national territory, the real lack of land productivity (and region).

Over the last twenty years, important progress (on the institutional, legal and technical levels) was made with regards to: (i) fight against desertification; (ii) Conservation of the Biodiversity; and (iii) integrated management of the Marine and coastal ecosystems. The environmental policies are handled by the national strategy on sustainable development, adopted in 2006, and the national action plan for the Environment (PANE), the 2nd edition of which was adopted in 2011. However, it should be noted that PANE I was very weakly implemented because it was not used as a dashboard for the policies, programs and projects implemented between 2006 and 2010. Consequently, few lessons can be drawn from this first phase to measure good progresses. The environmental challenges remain focused around the following problems: (i) impacts of climate change on water resources, soil, living conditions and urban development; (ii) environmental, national and local governance, defective in terms of standards and application of the available instruments; (iii) the integration of the environmental challenges and climate change in public policies; (iv) the degradation of ecosystems and biodiversity; (v) pollution,
waste management and natural disasters; (vii) environmental education; (vii) the decentralization and the devolution of capacities with regards to monitoring, assessment and coordination of environmental policies; and (viii) the deficit in production of data, availability and reliability of existing information systems.

From its geographical position and economic importance of mining and fisheries, the Mauritanian authorities give more and more special attention to environmental issues. This interest resulted in the establishment of overall and themes-classified environmental strategies (fight against desertification, climate change, waste management, domestic energy, coast development, protected areas, etc.), as well as a broad regulation covering the main sectors in question. However, there are still many insufficiencies in terms of abidance to this regulation and implementation of the adopted strategies. This situation carries on ecosystems and biodiversity degradation and causes damage to the populations, particularly the most vulnerable (precarious rural areas and urban districts).

Thus, within the 2011-2015 action plan of the Strategic Framework of Fight Against Poverty (CSLP), clear objectives have been defined: (i) to provide the poor with basic needs starting from sustainable management of the natural resources; (ii) to reduce the economic costs of environmental pollution; and (iii) to develop sustainable financing mechanisms for the environment in accordance with the principles defined in the national strategy of sustainable development. Moreover, the Government imposes, from now on, on each operator in the mining and fishery sectors, special provisions having to do with the safeguarding of the environment and biodiversity. The policy of environmental control remains however limited, because of the limited resources and capacities of the Ministry in charge of the environment and, by the impact and challenges of the economic issues which often take priority over the safeguarding of the environment.

The companies’ adoption of environmental standards remains limited to some large-scale companies. For instance, in 2011, SNIM obtained ISO 14001 certification for environmental protection. Mauritania, which has a very important potential in renewable energies is always strongly dependent on fossil energies. Since 2000, the demand for electricity increased by almost 10% per annum. In the summer time, the total demand of the capital city of Nouakchott exceeded the production at levels of 70%, which lead to serious power cuts. The production costs of electricity are high (costs of hydrocarbons + high loss rates) and demand remains limited by the insufficiency of the offer. Renewable energies are slightly integrated into the national energy overview. The objective of the current government strategy is to raise this integration to 20% by 2020, with the construction of a solar plant of 45MW and a wind farm of 60 MW by 2015.

Mauritania is the only country of the sub-region in which consumption of ozone layer-impoverishing substances have increased between 2000 and 2010. This increase was estimated at approximately 30% over this decade. The measures taken to stop this tendency were insufficient and limited to the elaboration of a National Plan for Refrigerants, which was very partially implemented, and to the installation of a national center for recovery and recycling of CFC.

Lastly, Mauritania prepared, between 2007 and 2012, within the framework of the Poverty and Environment initiative, supported by the UNDP and the UNEP, a number of strategic documents and instruments for the integration of environment into the public policies and for a better visibility of the bonds between the three pillars of sustainable development in the comprehensive and sectoral strategies of development. However, none of these instruments have been included in the processes of environmental governance.

Sudan. The bonds between the conflict and the environment have always been double. On the one hand, the long-lasting conflicts in this country had a considerable impact on the environment, whose most important repercussions are indirect and include displacements of population, absence of governance, overexploitation of resources and underinvestment in sustainable development. In addition, the environmental problems have often been amongst the causes of conflict. Gas and oil reserves, Nile River water, wood exploitation, as well as problems related to the use of the arable lands and pastures are very numerous, thus binding the exploitation of the natural resources to resolve the social, political and economic problems of the country.

A report published by the UNEP in 2010, on the environmental management of Post-conflict Sudan emphasizes the importance for the country to address a number of major environmental challenges,
such as: (i) reinforcement of the capacities of the Department of Environment in Khartoum; (ii) improvement of access to information for a better environmental governance; (iii) integration of the environment in public policies; (iv) effective investment in environmental management and safeguarding of natural resources; (v) implementation of assessment programs for Energy and Wood resources, including projects of reforestation, as well as the promotion of alternative solutions to the use of wood for heating and in the construction industry; (vi) the setting up of sustainable financing mechanisms; and (vii) deforestation and impoverishment of the soil.

Climate change threaten the prospects for a sustainable peace and development. Poverty, which is the main cause of intensive exploitation of the marginal lands, water and forest resources, destabilizes the ecological equilibrium which is already very fragile.

The rates of access to drinking water and the sanitation are respectively at approximately 60% and 30%, with serious social and geographical disparities. Access to sanitation services was estimated by the SHHS34 (2010) to approximately 27.1% at the national level, and at nearly 47% in urban areas and 18% in rural areas. Sudan may not be able to achieve this target of MDG 7 which expects an access of 82% in 2015.

Tunisia has achieved considerable progress, particularly relating to the : (i) increase of forest coverage rate (13% of the national territory in 2011); (ii) increase of the rate of connection to the sanitation network; (iii) creation of controlled dumps; and also (iv) setting up national parks and natural reserves. However, the expected extent of climate change lets predict considerable negative impacts on the water resources, agriculture and natural resources. In order to deal with these impacts, the Tunisian government implements adaptation measures to increase the resilience of the ecosystems, natural resources and vulnerable economic sectors, especially agriculture and tourism. In addition, mitigation measures relating to the increase in GHG emissions have been dealt with through sustainable development policies with low carbon intensity (table 3).

The country has currently implemented several projects and CDM programs (Clean Development Mechanism) in various fields, especially: (i) energy efficiency (cogeneration, thermo-isolation of buildings, spreading of low-consumption lamps, energy substitution); (ii) renewable energies (wind energy, solar and biomass energy); (iii) development of the collective urban transport; and also (iv) ecologically-rational waste management. Tunisia has been developing for twenty years now a number of programs aiming at achieving a rational use of energy. Thus, the energy efficiency policy applied to the main energy-consuming sectors was set up. It has allowed to achieve energy saving of about 3 Mtoe, in industrial, transport and housing sectors. This policy will allow saving of about 30 mtoe by 2020 and 80 mtoe by 2030.

In this context, and following the footsteps of the majority of the developing countries, Tunisia relies on the quick fast functioning of the financing mechanisms, such as the Green Climate Fund, as well as those dealing with the transfer and development of technologies, which are in the course of design within the framework of the current negotiations on the future post-2012 agreement on climate change.

The national strategy of sustainable development (2012-2016) identifies 10 major strategic goals for the country: (i) To establish sustainable consumption and production; (ii) To advance social equity and balance between the areas; (iii) To sustainably manage natural resources; (iv) To promote sustainable cities and villages; (v) To harmoniously and sustainably manage the coastline; (vi) To promote sustainable transport; (vii) To rationalize energy consumption and promote new and renewable energies; (viii) To reinforce capacities of adaptation to climate change and desertification; (ix) To promote the economy and knowledge society; (x) To improve the governance of sustainable development. In term of environmental governance, Tunisia will focus its future interventions around the following axes: (i) Reinforcement of the integration of the environment in the sectoral policies, plans and development programs; (ii) Support the planning and environmental action at the regional level; (iii) reinforce capacities of the stakeholders in the field of environment and sustainable development; and (iv) improve monitoring and assessment devices in the fields of environment and sustainable development. Lastly, Tunisia has presented in May 2012, within the framework of the international forum on financing development projects in the New Tunisia, a series of projects of infrastructures and sustainable development, with regards to the fields of the sanitation and depollution.

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34 Sudan Household Health Survey
Table 3 summarizes the main environmental indicators for the countries of the sub-region.

**Table 3. The main environmental indicators by country**

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<tbody>
<tr>
<td>Algeria</td>
<td>0.57</td>
<td>6.2</td>
<td>313 (&lt; 1000)</td>
<td>83</td>
<td>95</td>
<td>2.6</td>
<td>121.3</td>
<td>1.138</td>
<td>45.6</td>
</tr>
<tr>
<td>Egypt</td>
<td>-1.73</td>
<td>6.1</td>
<td>22 (&lt; 1000)</td>
<td>99</td>
<td>95</td>
<td>2.1</td>
<td>216.1</td>
<td>903</td>
<td>146.8</td>
</tr>
<tr>
<td>Libya</td>
<td>0.00</td>
<td>0.1</td>
<td>109 (&lt; 1000)</td>
<td>ND</td>
<td>97</td>
<td>1.3</td>
<td>62.9</td>
<td>3</td>
<td>31.6</td>
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<tr>
<td>Morocco</td>
<td>-0.23</td>
<td>1.5</td>
<td>899 (&lt; 1000)</td>
<td>83</td>
<td>70</td>
<td>1.6</td>
<td>48.8</td>
<td>517</td>
<td>22.3</td>
</tr>
<tr>
<td>Mauritani</td>
<td>2.66</td>
<td>1.1</td>
<td>153 (3000)</td>
<td>62</td>
<td>26</td>
<td>3</td>
<td>2.1</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Sudan</td>
<td>0.08</td>
<td>4.2</td>
<td>672 (2000)</td>
<td>58</td>
<td>26</td>
<td>2.6</td>
<td>14.3</td>
<td>371</td>
<td>7.8</td>
</tr>
<tr>
<td>Tunisia</td>
<td>-1.86</td>
<td>1.3</td>
<td>393 (&lt; 1000)</td>
<td>94</td>
<td>85</td>
<td>1.5</td>
<td>25.2</td>
<td>913</td>
<td>16.1</td>
</tr>
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</table>
1.2 - Synthetic profile of sustainable development of the sub-region

The examination of the reports and documents produced at the level of each country and the sub-region made it possible to release a number of major features, according to achieved progress, constraints and challenges which are still to be tackled. These features shape the profile of sustainable development of the region, which will make it possible to advance towards the definition of future strategic directions. This description makes it possible to approach the challenges of sustainable development on three levels: (i) issues shared by all the countries; (ii) issues shared by countries with similar profiles; and (iii) specific issues.

1.2.1 - Shared problems

The countries of the sub-region show a number of similarities in their economic, social and environmental contexts that should be dealt with as a whole in order to succeed in the transition towards a sustainable development. It works especially:

- **On the economic plan**: (i) reinforcement of the economy resilience vis-à-vis climate risks; (ii) the need for diversification of the economies in order to reduce their dependence on one or two sectors; (iii) containing inflation by a better control of the prices and the market and by a more successful regional integration; and (iv) the control of regional disparities, especially in terms of orientation of investments and optimization of potentialities of each country;

- **On the social plan**: (i) the reforms of the education system for a better adequacy with the training and market needs for employment, with particular emphasis on alleviation of unemployment among young people; (ii) the reduction of inequalities between Men and Women, especially in access to political decision-making positions and economic factors; (iii) the control of population growth, urbanization and promotion of industrialization;

- **On the environmental level**: (i) the reduction of human influence and of economic activities which have negative impacts on coastal areas and the fight against desertification; (ii) the development of natural resources for a successful transition towards a green and inclusive growth; (iii) the control of energy and efficient valorization of the extraordinary potential of the sub-region in renewable energies in order to reinforce energy efficiency; (iv) the need for integrating the environment in public policies; (v) the integrated management of water resources and control of sanitation in rural and semi-urban areas; and (vi) the control of the impacts of climate change and natural hazards management.

1.2.2 - Problems shared by countries with similar profiles

It is worth mentioning at the conclusion of the overview carried out in the previous chapter is that there are serious disparities between relevant countries. These disparities have direct impacts on the strategic choices to be made by each country to achieve a sustainable development in the sub-region. This involves, for a given themes, not only to take special actions following the progress made by each country, but also, to define specific partnership frameworks in terms of best experiences sharing, capacity building and technology and know-how transfers.

The seven countries can be categorized into five groups according to the main criteria of sustainable development (for example: their natural resources as of the environmental pillar, their workforce as of the social pillar and their level of incomes as of the economic pillar):

- **Category 1.** Includes Morocco and Tunisia, which show many similarities. They are countries with medium incomes, poor in natural resources and rich in workforce. They developed a very important service sector for their economies.

- **Category 2.** Includes Egypt and Algeria: Countries with medium incomes, rich in natural resources and workforce. It is however necessary to moderate the similarities by specifying that the Algerian model is an economic model in transition, where still remain several barriers to liberalism (less opened to investment).

- **Category 3.** Libya which is a country with higher medium incomes, within an economy in transition, rich in natural resources but poor in qualified workforce (strong dependence on foreign workforce).

- **Category 4.** Includes Mauritania and Sudan; countries with low-incomes, rich in natural resources and workforce.
It seems important to us, initially, to take account of this classification for better directing the actions to be carried out. To illustrate this suggestion, we put forward the following notes:

- Morocco, Egypt and Tunisia carried out more important performances than the others with regards to integration of environment in public policies, development of clean technologies (renewable energies, establishment of funds of clean technologies and specialized technological institutes) and, of the progress noticed in the design and preparation of mechanisms of transition towards green economy;

- On the financial mechanisms, we can notice that Algeria and Libya are the only countries to have carried out investments in equities with regards to sustainable development, whereas Egypt, Morocco and Tunisia knew how to exploit the existing regional and international mechanisms (e.g. Clean Development Mechanisms);

- Morocco, Tunisia, Egypt and Algeria witnessed significant progress toward achievement of MDGs and especially with regards to reduction of poverty;

- Concerning food security, and although the entire zone is in strong dependence to cereal imports, there are strong disparities. Egypt remains the largest agricultural producer but also an importer and consumer of cereals, with serious economic and financial difficulties. Libya and Algeria are highly dependent on cereal imports but have solids budgets. Morocco and Tunisia remain vulnerable because they are too dependent on imports, in addition to their serious budgetary constraints. Sudan has an important agricultural potential but is likely to have detrimental budgetary problems taking into account the drastic reduction of oil revenues since the separation of Southern Sudan. Mauritania is the only country in the sub-region with recurring food crises and structural budgetary difficulties. Mauritania and Sudan remain far behind in terms of human development and environmental governance.

- In terms of green and inclusive growth, interesting experiments have been carried out in Algeria, Egypt, Morocco and Tunisia. It is the case in development of new and renewable energies for instance, or in policies of energy efficiency. Sudan, Mauritania and Libya are far behind in this field.

- In terms of domestic energy, Morocco, Algeria, Tunisia, Egypt and Libya show dependence to wood and charcoal lower than 25%, whereas it is of more than 55% in Mauritania and more than 80% in Sudan.

- Morocco, Tunisia, Algeria and Egypt recorded important progress in the achievement of Goal 7 of the MDGs between 1990 and 2011. This is not the case for the three other countries.

1.2.3- Specific problems

These are issues with regards to which some countries have more serious problems than have others and, for which the approaches to be adopted become more specific. It is the case, especially: (i) for the strong food insecurity in Mauritania, which affected nearly 17% of the population in 2012, and its economic, social and environmental consequences; (ii) for the inadequacy of the institutional and regulatory instruments of sustainable development and environmental education in Libya; (iii) for the monetary depreciation and management of urbanization and sustainable housing in Egypt with a very strong demographic pressure which generates particular environmental problems at a large scale; (iv) for the revival of growth and exploration of financing mechanisms for sustainable development in Sudan, in order to mitigate the losses related to the split of the country into two; (v) for the management of the out-of-dated chemical products in Morocco, where a stock of almost 5,000 tons threatens the environment and human health.

1.3- The great challenges on the regional scale

From the last chapter, we can retain a number of challenges of regional scope. These major issues, widely shared by different counties, are likely to become a real obstacle for the sustainable development in the sub-region in the future. It is noteworthy that the region of North Africa is a uniform physical and geographical space, composed of a set of interlinked and interdependent ecosystems. These characteristics require, in order to preserve the common environment, joint actions between all governments of the region within the framework of an intelligent cooperation based on observation,
monitoring, information and expertise sharing, as well as the implementation of appropriate programs and instructions. This environmental solidarity must surpass the economic and political divergences, likely to exist between member states.

1.3.1. On the environmental level

1.3.1.1. Water and soil resources

The seven countries suffer, in different degrees, from the problem of desertification, which destroys the biological potential of the soil and whose consequences are water scarcity, declining land productivity, loss of biodiversity and degradation of life quality. Among the causes, some are of natural origin, others are obviously related to the action of man (over exploitation of natural resources, inefficient public policies, poor cooperation between the different actors, lack of long-term perspective ...). Although these issues are shared, in a common geographic and economic space, national policies to fight against these phenomena are undertaken by countries in various manners, without specific coordination, and whose effectiveness often depends on available financial resources coming more often from international cooperation.

The increase in irrigated area and the increasing pressure on a scarce water resource, which limits are not always known, may lead some countries beyond the breaking point. This is already affecting Libya and threatens, in the short to medium term, Tunisia and even Algeria. For example, it is estimated that Tunisia has only 4560 million m²/year of renewable water resources, i.e. 3% of the water resources of the sub-region. By 2020, many studies predict a real water scarcity for Libya and Tunisia, countries sharing the waters of the Northern Sahara Aquifer System (SASS) with Algeria. Again the mobilization policies of water are conducted, by each country, depending on the assumed availability of this resource. By getting reduced with this regular pressure, water resources could become a major source of conflict. This is also the case of cross-border groundwater between Libya and Egypt.

1.3.1.2. Renewable energies

On the issue of renewable energies and despite unequal potentials and different and poorly-exploited resources, the countries of North Africa face today similar challenges in terms of energy security. Indeed, energy demand is steadily increasing (8% in average per year) and needs are covered by subsidized fossil energy. To overcome this situation, the countries are developing -at different speeds and successes- policies aiming at increasing significantly the share of the renewable energies in the energy mix (less than 3% of the capacity of electricity generation). Some countries, like Algeria, Morocco, Tunisia and Egypt, have made substantial investments. However, many constraints must be removed within a vision of regional integration, in order to allow access to these energies. The solutions are the promotion of technology transfer, by strengthening exchange networks and partnerships between member countries, and the optimization of cross-border interconnection infrastructures. Mauritania is implementing an ambitious strategy of integration of renewable energies by 2020. Libya and Sudan are currently lagging behind in this field.

In this sector and despite its important assets (labor, expertise, solar and wind reserves, achievements in energy efficiency ...), North Africa remains the least integrated regions. Frameworks and strategies for wider cooperation can be enhanced such as the Pan Arab Renewable Energy Strategy (2010-2030) or the Mediterranean Solar Plan (MSP). This involves developing the capacity of solar power generation in North Africa to achieve, by 2020, some 20,000 MW, a part of which will be dedicated to the connections between North African countries. Indeed, currently, most cross-border exchanges in electricity target Europe or the Arab world.

1.3.1.3. Natural resources and climate change

Climate change is likely to impact, in short term, people’s life in the sub-region and contribute to the degradation of natural resources. The increasingly important emissions of greenhouse gas, the observed changes in rainfall and temperature, the risks of rising sea level (case of Tunisia, Egypt and Morocco, as mentioned above) and the increase in extreme weather events are today all visible signs and challenges for this region. The investments, required to reverse or even stop this trend by adaptation or

mitigation of climate change, will particularly be heavy and difficult to handle by the countries if emergency policies were not carried out in this field.

For a better consideration of issues related to climate change, the countries are currently making real efforts, differentiated and especially not concerted. Morocco and Tunisia implement dynamic policies which allowed the setting up of solid technological and technical bases and regularly improve their technical and institutional capacities.

Despite a stated willingness and some pilot experiences, Egypt faces an incomplete legal framework and a very slow implementation. Algeria, despite the implementation of adaptation and mitigation of projects climate impacts, respectively in the fields of forestry, water and health, has hindsight in relation to the challenges and opportunities offered in terms of mobilization of external financing and capacity building. Libya, Mauritania and Sudan continue to lag behind the other member countries, although Libya counts among its achievements the implementation of projects in water resources field.

The region has an important biodiversity for the world patrimony and for the equilibrium of ecosystems. According to the UNEP\textsuperscript{37}, eight hundred and seventy plant species are classified as rare, threatened or endemic in North Africa. Some areas of high biodiversity of turtles and marine mammals are more and more under the threat. The International Union for Conservation of Nature (IUCN) estimates that more than a hundred of these species are today endangered in this area, due to the overexploitation of resources, human pressure, drought, heavy grazing, unsustainable tourism or armed conflicts, old or dormant (like in Sudan).

Other issues like the less mastered impacts of industrialization (potential pollution) or the heavy human pressure on coastal and urban areas are major issues largely shared by these countries.

1.3.2. On the economic level

The promotion of the economic growth and good governance represents one of the major objectives stated by the governments of the different countries of the sub-region. The diversity of natural resources that this area enjoys and the existence of a strong physical infrastructure and human resources of quality are important assets to enhance the economic development thanks to the regional integration. Despite the limited progress made in this respect, notably by signing trade agreements (bilateral or inter-regional), as well as the occurrence of conditions that are widely favorable (increase of the price of oil and some minerals...), there remain constraints that hinder the economic dynamosims of the sub-region and which should be removed.

Economies vulnerable to climate hazards

The climate hazards generate a loss of soil productivity and continuous degradation of vegetation cover, which renders economies particularly vulnerable. These different factors contribute to the degradation of the agricultural sector, food insecurity, the establishment of scarcity and dependence of countries in the region vis-à-vis the global market for basic necessities. Yet the agricultural sector plays an important role in the economies of different countries (30% in Sudan, and an average 10% of GDP for other countries except Libya and Mauritania, where it registers less than 4%). Then, the agricultural development is inseparable from the management of water resources (over 80% of this resource are allocated to agriculture in different countries), and the choices made by public policies in this matter. This dependence of the countries of the sub-region to world imports leaves room for possible catastrophic food insecurity (stock-outs, no control over global prices ...).

Economies highly dependent on natural resources

The economies of the countries of the sub-region are mostly dependent on the exploitation of natural resources and remain undiversified. To illustrate this, we can take the examples of Algeria and Mauritania. For Algeria, the hydrocarbon sector accounts for 98% of total exports\textsuperscript{38} and 70% of budget revenues, i.e. USD 71.4 billion. Between 2011 and 2012, the country registered a very low level of non-hydrocarbon exports, worth USD 500 million. The report of the Central Bank of Algeria (2012) notes the weak external competitiveness of the national economy, still dependent on imports, including goods, which moved from 3.5% to USD 23.9 billion. In terms of FDI, the results are also not satisfactory as they

\textsuperscript{37} UNEP, 2013. Biodiversity loss due to expansion of cultivated lands in tropical countries

\textsuperscript{38} For 2011
were slightly less than one billion dollars during the first six months of 2012. For Mauritania, exports remain highly concentrated in a very limited number of products (minerals, fishery, cattle to a lesser extent and oil) and this increases the economy’s degree of vulnerability.

**Economic growth insufficient to generate employment**

The economic growth of the sub-region is still insufficient to generate employment. After a rapid increase between 1960 and 1980, growth and employment began to stagnate in the major North African countries. Between 1980 and 2010, per capita growth has averaged only 0.5% per year in the sub-region.

The economic growth and employment policy remain limited by the poor results of the national production, particularly in terms of creating value added, but also because of the strategies for wealth redistribution (especially those derived from natural resources) that are still insufficient or non-existent. Taking into account the observations made in this respect, it now seems mandatory for the governments in the sub-region to reform their economic policies to promote more inclusive growth which is job-creating and income-generating and which will allow the whole region enjoy a sustainable political stability.

1.3.3. **On the social level**

On the social level, the countries of the sub-region, except Mauritania and Sudan, experience a regular human development, with real achievements in the fight against poverty and significant progress in achieving the Millennium Development Goals by 2015. However, this should not overshadow some constraints such as unemployment, inequality between social classes and regions, migration fluxes that are increasingly important or even the food insecurity. It is also worth noting the lack of integration of sustainable development into the education system, which guarantees change of behavior, understanding and issues ownership by young people and future generations.

**A disturbing unemployment rate, especially among youth**

The unemployment rate averaged around 12% over the past two decades, representing a threshold rarely achieved in the world. In 2012, the unemployment rates in Egypt, Morocco, Sudan and Tunisia were between 10% and 20%, while it averaged 32% in Mauritania. Moreover, there are real disparities between different social groups and geographical areas within a country (provinces, rural vs. urban ...). This is the case for all countries as to the disparities between the different provinces, but also in terms of the differences in development between urban and rural areas, and gender disparities.

The high rate of unemployment, especially among youth, women and graduates of higher education is a social and economic problem for North Africa. Despite considerable investments, the educational system does not provide the skills needed by the labor market. This situation prevents the growth of sustainable employment, especially for new graduates, and promotes the development of the informal market. In addition, social security nets are weak and most workers have no social protection.

Finally, it is important to note that despite the magnitude of this problem and its political, economic and social consequences, there is currently no initiative of regional cooperation for employment issues, in particular, and human development in general.

**A threatening food insecurity**

The countries of North Africa are heavily dependent on grain imports. This dependence makes them vulnerable to shocks related to changes in food prices on the international market. Prices are continuously increasing for more than ten years. Recently, significant declines in cereal production in the United States and Russia have been registered. In this context, the issue of food security becomes crucial for the countries of the sub-region.

Indeed, since more than ten years, the prices of these foodstuffs continue to rocket. To solve this problem, the Council of Maghreban Ministers, signed in June 2010 in Tripoli an agreement aiming at establishing a free trade zone for agricultural products exchange between the countries of the AMU. In addition, the meeting in 2009 in Marrakech (Morocco) of the ministerial committee specialized in food security had emphasized the need to strengthen the commercial exchange of agricultural products to reach food security in the region. Beyond the trade and supply issues, countries noted the necessity to fight against the challenges of food security policy at the regional level, namely: sustainable water
management, the establishment of a common policy to stabilize food prices and the strengthening of production systems.

The latest FAO report\(^9\) on food insecurity in the world shows that North Africa has about 4 million people suffering from undernourishment, i.e. 2.7% of the total population. This number does not seem to have changed since 2007, unlike the sub-Saharan Africa which moved from 216 to 234 million undernourished people, be it 26.8% of the population of this region. In developed countries, the percentage of undernourished people increased from 1.3% in 2007 to 1.4% in 2012.

The report also highlights the fact that agriculture in the sub-region has the potential to contribute to poverty reduction which remains moderate, or at least equal to that of non-agricultural sectors. The case of Mauritania and Sudan seem to be different from the five other countries due to their low level of urbanization and especially the concentration of the poor in rural areas. By these characteristics, these countries seem more comparable to African sub-Saharan countries, where agriculture contributes more significantly to the economic growth. Significant efforts in this field from these two countries could be an important driver of economic growth.

Finally, the FAO report notes an increase in obesity rate in all countries in the sub-region, with prevalence rates ranging from 10 to 20% in Morocco, Mauritania, Sudan and Algeria, between 20 and 30% in Tunisia, and over 30% in Egypt and Libya.

Chapter II
Rio+20 Conference’s outcomes and their involvement in countries’ policies of sustainable development

2.1- The main outcomes of the Rio+20 Conference

The objective of the Rio+20 Conference was, on the one hand, to renew the political commitment of the international community in favor of sustainable development and, on the other hand, to take stock of the undertaken progress and evaluate the different steps that are necessary to reach the defined goals. Two main themes were tackled: (i) the institutional and strategic framework for the implementation of sustainable development policies. (ii) the role of green economy in the context of poverty reduction in particular and the achievement of sustainable development in general.

The outcome document of the conference entitled ‘The future we want’ calls on the governments and the international community to get involved in the post Rio+20 follow-up Agenda covering the following:

- The process of defining the goals of sustainable development of global reach that must be approved by the UN General Assembly;
- The determination of the structure and organizational procedures of the high-level Intergovernmental Policy Forum, which will replace the United Nations Commission on Sustainable Development;
- Strengthening of the United Nations Environment Programme as a world authority recognized in terms of environment;
- Developing a report suggesting options for an effective financing strategy for sustainable development;
- Defining options for the establishment of a mechanism to facilitate promoting the development, transfer and spread of clean technologies that respect the environment;
- The launch of a programme of work on broader and complementary measures of gross domestic product;
- The designation of a body consisting of the Member States to operationalize the ten-year framework of programs for sustainable consumption and production.
- The promotion and integration of an inclusive green economy

It is in relation to these various points that we want to examine the implications of Rio+20 conference’s outcomes on policies undertaken by each country in the sub-region in terms of sustainable development. Account will be taken of the progress and initiatives undertaken to date by the international community in relation to each of these points.

First, on the level of the general perspective presented at the conference, there is a clear and coherent cross-checking with the strategic goals expressed by the countries of the sub-region. This can be illustrated through the following:

- The reaffirmation of the importance of the Universal Declaration of Human Rights and the need for implementation of good governance through democratic institutions at all levels of intervention;
- Ownership of the principle of common, but differentiated, responsibility and the plans, programs and policies already carried on in sustainable development. A principle that recognizes the historical responsibilities and different levels of countries’ development in terms
of obligations under multilateral agreements and will give North African countries better capacity and margin trading;

- The priority given to the elimination of poverty and social inclusion through the implementation of developmental programs, including infrastructure and reduction of youth unemployment.

- The fight against climate change and the promotion of green economy can be an opportunity to achieve the goals of sustainable development. The exploitation of the opportunities offered in this framework has contributed in some countries in the sub-region (Tunisia, Morocco, Egypt) to achieve significant economic performance;

- The need to strengthen international cooperation on technical and financial levels for an efficient integration of the three pillars of sustainable development.

- The importance of the regional dimension of sustainable development, which should be approached

2.2- Major implications of Rio+20 outcomes on sustainable development policies

2.2.1. The institutional and strategic framework for sustainable development

Countries in the sub-region recognize the need to better align the overall institutional system and recognize that the current international institutional structures do not fully meet the needs of Africa’s management of environmental and climate change issues, and balanced integration of the three pillars of sustainable development. They support the idea of strengthening, consolidating and transforming the United Nations Environment Programme into an international specialized institution for the environment based in Nairobi (Kenya). However, they affirm that the reform of the institutional structure should not be an end in itself but a means to achieve sustainable development.

Furthermore, and in order to engage all stakeholders at all levels of decision-making, the countries of North Africa have insisted that the principle of subsidiarity should be fully applied by setting relationship governance processes of sustainable development from the international (global scale) to the regional, national and local.

Given the gaps and constraints identified by the different countries of the sub-region in this area, on the one hand, and recommendations across the entire African region on the other hand, there may be suggested a number of recommendations aimed at strengthening the new global institutional and sub-regional framework:

- Integrate in the overall institutional framework, bodies dedicated to promoting coherence and coordination of sustainable development policies for Africa in general and in particular in North Africa;

- Increase synergies, coherence and coordination between regional institutions on the one hand, and the United Nations and international financial institutions, on the other hand;

- Create a regional institutional framework dedicated to sustainable development and consolidating the seven North African countries and strengthen existing frameworks, such as UMA, and the coordination between these frameworks and institutional arrangements in place in each country;

- Strengthen technical skills at sub-regional level;

- Fill gaps in regulation of regional governance for sustainable development, particularly in areas where the opportunity for regional integration is high (e.g. green economy, access to energy and promoting renewable energy, water resources management, food security, transportation, transfer of technology and skills ...)

- Improve transparency and speed in decision-making and encourage effective and active participation and dialogue between all stakeholders at the regional level (governments, civil society and private sector);

- Integrate the promotion of sharing best experiences and practices in sustainable development;

- Maintain in the regional institutional frameworks the global integration mechanisms that improve the alignment of social, economic and environmental pillars of sustainable development;
- Improve, at the regional level, the process of collection, production, analysis, propagation and exchange of information related to sustainable development and to coordinate at this scale the monitoring of treaties and multilateral environmental agreements signed by the countries of the sub-region.

- Strengthen at the regional level the role of the ECA in general and the Office for North Africa, in particular, for a better integration of the three dimensions of sustainable development;

- Support sub-regional and national authorities in North Africa in charge of sustainable development at the political level (better representation in the highest levels of decision-making), technical (planning, tools and monitoring) and financial, in order to achieve a better recognition of their responsibilities. Following the recommendations of Rio+20, each country will ensure the creation of appropriate institutions and bodies, and at different scales required (from national to local). They will also provide funding for these structures, as well as the technical and financial partnership procedures.

The decision to strengthen and enhance the role of UNEP as principal body in charge of environmental issues was taken by the United Nations General Assembly in December 2012 (67th session, resolution AG/11332) in accordance with commitments from the Rio+20 conference. The resolution of the General Assembly also offers UNEP an opportunity to receive secure stable and expanded financial resources from the regular UN budget. It establishes the principle of universal membership of the UNEP Governing Council and offering to all Governments the opportunity to make decisions and take action to support the global environment equally, and thus ensure a more equitable distribution of the planet resources. This resolution represents the first concrete step in implementing the outcomes of Rio+20. In addition, the UNGA decided to change the name of the Governing Council of the United Nations Environment Program (UNEP) which is now called “United Nations Environment Assembly of the UNEP.”

Given its geographical location and the interest it takes in Africa, the changing role and prerogatives of UNEP is an important step in strengthening the institutional and strategic framework of sustainable development. Strengthening and improving the coherence of its programs with those of the various sub-regional institutions, shall:

- Improve the integration of the three dimensions of sustainable development into national and regional sectoral policies;

- Taking into account the emerging challenges of sustainable development;

- Identification of priorities for sustainable development goals;

- The transition policy and programs related to the green economy;

- Identification of innovative financing mechanisms and partnerships;

- Capacity building in terms of monitoring and assessment of policies for sustainable development;

Consultations launched by the United Nations System, in collaboration with several development agencies, in order to encourage debate on the outcomes of Rio+20 and lead to more operational proposals include four countries of the sub-region (Morocco, Egypt, Sudan and Algeria) can be an opportunity to move forward on the proposals made in this report.

2.2.2. Means of implementation

2.2.2.1. Funding

The countries of North Africa have expressed their need for additional and predictable resources to those they will mobilize and called on developed countries to honor their previous commitments and deliver on their promises of financial means for implementation (financing, capacity building, development and technology transfer, promotion of regional integration ...). For example, developed countries promised during the International Conference on Financing for Development in Monterrey in 2002, to devote nearly 0.7% of GDP to ODA. Since then, efforts have been rather worn on the effectiveness of the ODA (Declaration of Paris, 2005). In the same vein, the international community in called on to secure the necessary funding for mitigation and adaptation to climate change on the basis of commitments made by developed countries in Copenhagen\(^{[1]}\) in 2009, then in Cancun in 2010.

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\(^{[1]}\) COP15 on climate change. Copenhagen, December 2009
to mobilize USD 100 billion annually from 2020 to address mitigation and adaptation needs of developing countries and enable the creation of a **Green Climate Fund**.

One of the resolutions of the COP 18 in Doha is the creation of the Green Climate Fund, which will be housed in South Korea and whose work should start in the second half of 2013. The operations of this mechanism should be launched in 2014. The commitments made in Cancun by developed countries were reiterated at the conference of Doha. Germany, the United Kingdom, France, Denmark, Sweden and the European Commission announced on the occasion concrete financial contributions for the period up to 2015, totaling approximately USD 6 billion.

Recognizing the importance of global economic crisis and the new challenges currently facing the developed world, the countries of North Africa should explore innovative ways in terms of funding sources. The private sector in the sub-region could be a key player in the financing of sustainable development in the region. For that, this stakeholder must become more involved in the development of instruments and available opportunities at national and international scales. However, the urgency of mobilizing these funds should not overshadow the need to explore the possibilities of internal financing by the countries themselves, especially to priority targets for the sub-region, particularly those relating to food security, the fight against poverty, unemployment or the integration of environmental concerns into sectoral policies. A win-win partnership among countries of the sub-region can be considered, including the involvement of countries with substantial liquidity, such as Algeria and Libya. The consideration of the recipient countries can be considered as forms of economic facilities in terms of investment or import or transfer of skills and technology. On the same basis, one can imagine the establishment of mutual funds from internal resources of the sub-region and can be used to finance best practices of sustainable development identified in the different countries.

It is also possible to explore the financing instruments available through the three major environmental conventions with particularity on the convention on the fight against desertification, poorest one among the three, and for which a specific strengthening can be requested to meet the challenges that arise in this sub-region with three-quarters desert. As such, it should be noted that so far the countries of the sub-region have shown limited capacity to operate this type of financial leverage. Projects and initiatives funded through mechanisms such as the adaptation funds or the CDM remain limited to some countries (mainly Egypt, Morocco and Tunisia). Countries such as Mauritania, Sudan and Libya remain outside this process. Finally, it would be very relevant and quite innovative for countries to undertake regional cooperation actions to mobilize financial resources for major sustainable development projects that support regional integration.

This should bring the countries to engage in a greater coherence and coordination between the various funding mechanisms, and to adopt an effective policy of Public Aid for Development in the context of a successful sub-regional integration. To underpin this vision, appropriate mechanisms should be set up, at sub-regional and national levels so as, on the one hand, to assess needs, and on the other hand to ensure efficient use of available resources.

Finally, North Africa should take advantage from voluntary commitments, estimated at around USD 500 billion, expressed at the Rio+20 Conference, especially in the following ten fields:

1. Eradication of poverty: this mainly relates to funds that will support the development and implementation of acceleration plans of MDGs;
2. Biodiversity, fragile forests and ecosystems: more than USD 61 billion;
3. Water: more than USD 4 million;
4. Sustainable energy: privileged orientation of funds towards Africa in general, and North Africa in particular;
5. Climate change: amounts to be granted to North Africa may be too small given the proposed geographic area (where other African countries are also proposed);
6. Sustainable development follow-up systems (indicators): these funds amounted at around USD 10 million are intended for the post-2015 phase;
7. Sustainable development economy: a major part will be dedicated to the promotion of green companies;
8. Sustainable development strategies and policies: financing actions that are centered on green economy;

9. Oceans and seas: for North Africa, it includes mainly efforts in favor of reduction of marine and coastal pollution;

10. Awareness rising and communication about sustainable development.

However, and in order to convert these commitments into concrete action, the countries of the sub-region should seize the parties involved in the above mentioned areas and define with them the terms of implementation of commitments. These actions could be concerted and coordinated within the framework of a global initiative in which nearby international organizations, including the ECA, must play a leading role (mobilization of funding from the parties involved, support to involved regions, discussions of the roles, responsibilities and schedule, inventory of the real needs ...).

It is to note that the ‘Voluntary Commitments’ represent an open register during the Rio+20 Conference, to which all stakeholders (governments, the United Nations System, intergovernmental organizations, private sector, civil society and NGOs) may subscribe to implement concrete policies, plans, programs, activities and projects to promote sustainable development and eradicate poverty. The conference requested the Secretary-General of the UN to draw up a register of commitments, to keep this register up to date and facilitate access to other records of commitments. In total, more than 700 voluntary commitments were actually recorded before, during and after the Rio+20 Conference. These commitments have been made by all the stakeholders and were divided into 23 areas.

2.2.2.2. Capacity building

The creation of high capacities is one of the basic actions to be undertaken by the countries of the sub-region to take the path of sustainable development. All countries will need this capacity building in terms of institutional, scientific, technical and organizational development, and in terms of the development of human and financial resources. It is such an essential way to facilitate the access of countries in the sub-region to climate change adaptation funds, but also to improve the absorption of acquired funds. To accomplish this, it should be within the framework of eligibility to existing mechanisms, programs and initiatives in a reinforced structure by new recommendations issued from Rio+20. This new vision could be underpinned by specific and measurable indicators to monitor and evaluate the actions implemented and the progress across the region and by country in terms of capacity building. A continuous and iterative monitoring process can be initiated from the sub-regional level to the local one.

Regional and sub-regional organizations such as ECA, AUC, AfDB and NEPAD should be able to ensure the development of capacities of regional, national and local institutions in North Africa. This cooperation will involve the various national statistical systems in each country. It is also an opportunity to link these institutions into the decision-making and evaluation of public policies across the sub-region.

2.2.2.3. Development and transfer of technologies

Promoting the transfer of environmentally-sound technologies, particularly to developing countries, was a central concern of the Earth Summit in Rio in 1992. Chapter 34 of Agenda 21, which serves as an action plan for sustainable development, is entirely devoted to this issue.

The outcome document of Rio+20 confirms the need for technology transfer to developing countries, while noting that the transfer should be done by mutual agreement and not be mandatory for developed countries. This outcome document urges the competent UN agencies to identify options for
a facilitation mechanism that may promote the transfer of technologies, by assessing technology needs of developing countries, and meet these needs.

The countries of North Africa have agreed to strengthen the achievements in scientific research, innovation and technology transfer through increased investment in these areas. However, they insist on the need to take advantage of technology support and capacity building in accordance with the commitments made by the international community respectively in summits in Rio 92 (Agenda 21), in Johannesburg, but also in the Bali Conference41.

Countries in the sub-region could consider that developing a facilitation mechanism can represent a breakthrough because previous commitments on technology transfer have all suffered from the lack of concrete follow-up to make them operational. However, the international community should consider the profound changes in the global landscape of technology and innovation over the past two decades, including the development of clean energy.

Although access to clean and green technologies is now very differentiated in the countries of the sub-region, there remains a need for these technologies as they are particularly suited to local needs and constraints, especially the challenges related to climate changes (including water and energy). Nevertheless, access to these technologies involves having the know-how, skills, infrastructure, as well as specialized institutions, which is far from being the case in some countries of the sub-region. Special efforts should be provided to countries that are lagging behind in this area. Besides, research and development institutions are still embryonic and limited in the sub-region, and therefore cannot alone promote sustainable development of clean and environmentally-friendly technologies. As a result, country members expressed the need to strengthen partnership networks between research centers in the sub-region and developed country partners. This support will be more effective than any promotion of new tools for sustainable development, and depends on effective leadership in technologies from the countries of the sub-region.

Countries should promote sub-regional cooperation between the various research/development centers and institutions in charge of environmental and sustainable development issues. Indeed, targeted vocational training, higher education performance, which can be supported to research by centers specialized in various areas of development, are tremendous assets for the success of sustainable development policies.

It is worth mentioning that Algeria will soon house the Research Institute for Sustainable Development in Africa under UN. It will aim at the provision of training that contributes to strengthening the expertise of the African continent, but also the creation and development of centers of excellence that attract high-level teachers as well as elite students at various cycles of higher education. The development of activity program and open education on practices related to public policies of African states served by the UN network, is also one of the objectives of this institute.

The following table 4 shows some examples of research/development centers in the sub-region:

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41 Bali Action Plan on Climate Change, 2008
Finally, it is useful to propose the establishment of a mechanism adapted to the characteristics and challenges of sustainable development in the countries of the sub-region. Governments should therefore consider the establishment of a political and legal framework for the promotion of technology, scientific research and sub-regional industries. An inventory in each country as well as platforms for knowledge sharing and experiences capitalization should be put in place. Research/development programs designed and implemented at the regional level should better take into account emerging challenges such as the green economy and climate change. Funding for these activities will be provided by countries and cooperation funds with Northern institutions. One can also rely on the dynamics of other organizations (UMA, Arab League, and African Union), partnerships (NEPAD) and other development agencies and networks operating within the sub-region, in Africa or in Middle East Region. The establishment and management of special funds dedicated to the development and technology transfer could be facilitated by local institutions such as ECA or the African Development Bank.

2.2.3. Sustainable Development Goals

In a world characterized by an increasing scarcity of natural resources, population growth and increasing social protests of populations, political decisions will not be made without difficult compromises. The Sustainable Development Goals (SDGs), which were introduced late in the negotiations, may help governments make such decisions. They can highlight the constraints and opportunities for long-term planning and investment. The SDGs do not replace but complement the MDGs, the importance of which was highlighted by the international community at Rio+20 Conference. They should be the driving forces of public policies to...
tackle critical issues related to sustainable development. They must also show how the three pillars of sustainable development are interdependent. To define the SDGs, the outcome document of Rio+20 suggests that countries should establish a transparent and participatory mechanism open to all relevant stakeholders. According to this outcome document “sustainable development goals must be action-oriented, concise and easy to communicate, limited in number, aspirational, global in nature and universally applicable to all countries while taking into account different national realities, capacities and levels of development and respecting national policies and priorities”. The UN General Assembly decided during its 67th session to create an open-ended working group on sustainable development goals, in accordance with the recommendations of the outcome document of the United Nations Conference on Sustainable Development (Rio+20). This working group is mandated to identify global sustainable development goals to be adopted by the General Assembly for the post-2015. It will start its work in 2013 and submit its proposals to the 68th session of the General Assembly in 2013. Four countries of the sub-region are part of this working group: Algeria, Egypt, Morocco and Tunisia.

In Africa, the ECA has initiated a regional consultative process to enable African countries to participate in the overall process aiming at the identification of the SDGs. This process shall ensure that they reflect the development priorities of the region in the SDGs. In this context, the ECA will support in 2013: (i) the development of five sub-regional and regional reports on the major priorities of sustainable development and SDGs proposals, (ii) the organization of a regional consultative meeting to prioritize sustainable development and propose SDGs for Africa.

The countries of the sub-region advocate for keeping links between the MDGs and SDGs to preserve the coherence of the programs already in place and facilitate the integration of SDGs in public policy. Regional and sub-regional institutions should support countries in the formulation of SDGs.

The consultations should define the goals, indicators and targets to go along with the SDGs. Countries will ensure that they are: (i) rigorous, meaningful, clear and limited in number, (ii) in compliance with the principles of sustainable development agreed upon in Rio in 1992 with the priority concern of poverty eradication (iii ) an answer to the integration of the three dimensions of sustainable development, (iv) informed from databases and results already achieved in follow-up to the MDGs in each State, (v) integrated into a system for data gathering, analysis and management at the regional level and at the level of each State.

2.2.4. The green economy

The North African countries agree on the importance of adopting transition policies towards a green economy to meet their development priorities. This is consistent with the position taken by the international community at Rio+20. They adhere to the principle of rooting the green economy in the national priorities and strategies without it becoming a barrier to trade. The green economy is a means to promote sustainable production and consumption.

The outcome document of Rio+20 was explicit about the need for countries to make a transition to an environmentally-friendly economy. Yet, it provided no details on the funding sources or amounts to be mobilized.

Countries take the challenges related to the green economy into account in different ways. Countries like Sudan, Mauritania and Libya have fallen far behind. It is necessary, however, to start a relevant reflection at the sub-regional level and design and implement an adapted strategy within the framework of sustainable development in the sub-region. In addition, appropriate policies and instruments should support the implementation of the green economy so that it can lead to an inclusive growth that generates employment and help protect the environment.

Being aware of the ineffectiveness of current growth trajectories, the countries of the sub-region have confirmed their will to be committed to the promotion of a green and joint growth. However, they are confident that the current trend can be reversed only through significant investments and deep social changes in their societies. This transition implies that economic analysis incorporates, beyond GDP, natural capital and ecosystem services in the recognition of national wealth.
To ensure the best possible transition towards a green economy, countries may agree on the following points:

- The importance of interaction between the three dimensions of sustainable development and the need to promote green economy as an effective implementation of sustainable development in the socio-economic fields;
- Conciliation of the priority given to food security, the fight against poverty and the creation of jobs, mainly for young people on the one hand and, the integration of the transition towards the green economy as a strategic challenge in the development model, on the other;
- The need to develop green plans and tools for the re-conversion of the production systems that have already been implemented in the countries of the sub-region to construct a solid basis enabling a continuous and gradual transition towards a green economy. This transition requires the development of appropriate financial and technological support tools;
- The strengthening of cooperation and international solidarity that play a key role in the management of transition at minimal cost towards green economies of counties in the sub-region.

To implement this vision it is required to:

(i) include the principles of inclusive green growth in existing development policies, programs and plans, at the global and sector levels as well as the local and national levels
(ii) involve all actors of civil society and the private sector in achieving a major objective of poverty eradication and food security. Efforts should be provided at the local, national and sub-regional levels, (iii) invite developed countries and the international community to honor the commitments made with regards to funding, capacity building and transfer and development of technologies that respect Man and his Environment, (iv) strengthen existing partnerships and establish new ones, be it technical, financial, global, regional and sub-regional for an effective integration of a green and inclusive growth in the development models, and (v) adapt institutional frameworks for a better consideration of all emerging challenges (green growth, sustainable consumption and production patterns, climate change).

Tunisia, Morocco, Egypt and Algeria have undertaken interesting experiences in this area. Several issues are either being tested or have been already experienced: sustainable agriculture, ecotourism, new and renewable energies and energy efficiency. In addition, political, institutional, regulatory and financial reforms have been undertaken in recent years by these countries. This reflects an awareness-raising in relation to economic, social and environmental issues linked to the targeted sectors, but also demonstrates the willingness to make the best potential for growth and the creation of job opportunities.

2.2.5. Climate Change

According to the forecasts of experts, the Intergovernmental Panel on Climate Change IPCC (2010), the countries of North Africa will be particularly affected by climate change, including rising temperatures, rainfall variability and increased sea level. The interaction of high population growth, the critical importance of agriculture to the economies of the different countries, poor integration of environmental issues in the governance process, makes these countries particularly vulnerable to the impacts of climate change.

According to these forecasts, by 2025, twenty-five African states will witness water scarcity and hydric stress, problems that may be particularly intense in North Africa. According to FAO (2010), the consequences of climate change will have disastrous impacts on agricultural production and food security. Reserves in agricultural soils may be severely depleted in countries like Mauritania, Tunisia, Algeria and Libya. As arable lands and water resources become scarcer and as far as unsustainable agricultural practices continue to be used, desertification will cause the impoverishment of the population and the risk of conflict over water resources and land might explode in some areas of the sub-region (e.g., North Sudan and South Sudan, the possibility of water conflicts between Egypt and the Nile basin countries). In addition, migration to southern Europe is likely to escalate.

Natural disasters have increased in North Africa, with increasing disastrous effects. In November 2010, the rainfall that has heavily fallen on Casablanca reached a record level of 18 cm in a single night, the equivalent of six months of normal rainfall. The floods have forced the closing of the international airport...
and many companies and schools across the city. Various public infrastructures had hosted more than 2500 families. From 10 to 12 December 2010, 28 buildings collapsed in Alexandria after heavy rains, storm surges and severe winds, which caused the death of 18 people and left dozens wounded. In September 2003, Tunis witnessed rainfall within 24 hours that is the equivalent of five times the level normally expected for the entire month of September. The disaster damaged buildings, caused deaths and flooded the drainage system of the city that has proved its inadequacy. Accelerated urban populations growth in the countries of North Africa exacerbates issues by increasing the potential losses due to natural disasters and climate phenomena. Casablanca and Tunis will count a population of approximately 15 million people in 2030.

The rise of the sea-level because of the impact of climate change remains up in the air. However, sea-level rise has been estimated in this study by the World Bank at about 20 cm by 2030. A higher sea-level would exacerbate storm surges amplifying the risk of coastal flooding and coastal erosion. So it is now urgent to implement adaptation and mitigations programs regarding climate change impacts through suitable policies, programs and projects, and also by implementing structural monitoring and alert programs at all decision-making levels (national and sub-regional). The main areas that are already concerned by the mitigation measures are agriculture, energy, transportation and industry.

To minimize the negative effects of this phenomenon, the countries of the sub-region should remain all strongly involved in the negotiation process aiming at adopting a new global climate treaty. In order to take into account the priorities and constraints of all countries, this treaty must be more ambitious in terms of emissions reduction targets. Negotiations undertaken must provide concrete answers to major issues such as equality, historical accountability, the right to development and cost-effectiveness. Meanwhile, the question of how to reconcile development and the fight against global warming matter has yet to be resolved.

2.3- Implications by Member State

In this section, we have tried to highlight the outcome of Rio+20 recommendations throughout each country depending on the specific issues identified. These implications are presented according to the major themes identified. Suggestions are enclosed to this document as Appendix 1.
CHAPTER III
PROPOSALS FOR MAJOR GUIDELINES

This section aims at formulating, based upon analyses undertaken in the previous chapters, various concrete proposals, likely to help addressing the constraints to sustainable development in the studied region. These proposals will be elaborated around the major themes that are likely to enable in the future this sub-region to really be part of a sustainable development process, taking maximum advantage of the opportunities offered by the Rio+20 conference outcomes.

The findings we have elaborated so far highlight three types of crises in relation to the North African geographical area: economic, social and environmental. Their nature and depth were examined at the level of each country and at the sub-regional level and the challenges identified thereto. To address these challenges, the countries of the sub-region should take into consideration the clear messages sent to governments and stakeholders for sustainable development at the Rio+20 conference, namely the need to transform the economies to meet social and environmental needs. The said transformation requires clear and well-targeted strategies, at the sub-regional level and at the level of each member State.

The major implications that we set in the previous chapter can be relevant themes for sustainable development of the sub-region. There are sector-specific and cross-disciplinary themes:

For sector-specific themes, we can mention:
- Sustainable Agriculture and Food Security;
- Green growth, poverty reduction and employment;
- Climate change and reducing disaster risks;
- Desertification, drought, land degradation and water resources scarcity;
- Sustainable energy;
- Sustainable management of natural resources and biodiversity;
- Sustainable cities and pollution management.

In addition to these themes, they are six cross-disciplinary themes:
- Efficient integration of the three sustainable development dimensions;
- Integration of education system in sustainable development strategies;
- Human capacity building and Gender mainstreaming;
- Adaptation of the institutional, policy and legal frameworks;
- Mobilization of funding and partnership;
- Technologies development and transfer;
- Sustainable Development Goals;
- Regional integration.

We suggest for next section to present a descriptive form by strategic themes. This form will allow, on the one hand, identifying issues in the context defined by the Rio+20 outcome document and, on the other, to suggest ways that can be used for future strategic directions for sustainable development in the sub-region.

3.1 - Efficient integration of the three dimensions of sustainable development

The effective and operational integration of the three dimensions of sustainable development was one of the shortcomings in the policies implemented by the different countries in the sub-region. It is one of the implementation conditions of the key principles agreed upon at Rio in 1992, which must be put into practice and verified at the level of public policies and also in private companies (according to Corporate Social Responsibility (CSR) procedures and guidelines). On this last point, significant and concerted efforts must be made by the countries taking into account the already accumulated delay and the need to open up to international markets subject to very strict standards.
This low holistic integration of the three dimensions is mainly due to the weakness of the implementation of sustainable development policies and their lack of harmonization with sectoral and cross-sectoral policies at the level of each country. The countries of the sub-region have already paid a heavy cost of this inconsistency, on the political level. Populations are paying social and economic costs because of unemployment and overall deterioration in purchasing power and living conditions.

The low holistic integration of the three dimensions has important consequences on the effectiveness of the policies adopted to fight against poverty. Ecosystem assessment through functions, goods and services, such as those implemented in specific ecosystems (wetland areas) in Mauritania, show that there is a direct relationship between the environment health (ecosystems) and the economic and social well-being and concludes that efforts to reduce poverty and improve human well-being can never be successful if nothing is done to stop the environment degradation. Fundamentally, the goods and services that stimulate our economy and underpin our social systems result, largely, from healthy environments. These steps allowed providing governance options putting sustainable ecosystem management at the service of local and national development. Scenarios to reduce poverty through sustainable use of natural resources have been available locally. Unfortunately, these recommendations have never been implemented and verified through practical actions.

To go forward with sustainable development, it is important to keep in mind the fundamental principle to which environmental viability, economic development and social well-being are complementary goals. In reality, the importance of the environment for the other two dimensions of sustainable development is not sufficiently recognized in the major decision-making processes. Five principles are important to include if we want to succeed this holistic approach: (i) the political will of all countries, (ii) the identification of a coherent cross-purpose framework, (iii) capacity building, (iv) removing the institutional and legal obstacles, and (v) the establishment of a sustainable assessment framework of the results and efforts made to ensure policy coherence.

Several guidelines related to how to integrate environment and/or sustainable development have been developed in some countries, such as Morocco, Mauritania, Tunisia and Egypt. However, practical examples of implementation are rather rare.

Some positive examples related to the integration of the three dimensions of sustainable development can be mentioned:

- Implementation of strategies for integrated management of water resources in Algeria, with positive impacts on agriculture and the improvement of living conditions of the populations,

Or

- The effect of economic growth around 7% before 2008 on the eradication of poverty and safeguarding the environment, in Morocco and Egypt.

However, the process of integration of the three pillars still has shallow roots in the strategic planning of sustainable development, both at the sub-regional and the national levels. Few integrated programs have been implemented in the countries. This issue of integration is also closely linked to the institutional mechanisms and to the harmonization of policies, regulations and procedures.

Strengthening the missions and resources of UNEP, recently decided by the UN General Assembly, should enable the institution to better support the implementation of this issue, mainly in developing countries, particularly in North Africa.

To achieve this, it is necessary to:

- Develop articulated information systems and governance indicators, combining the three dimensions;
- Promote integrated ecosystem assessments;
- Involve all social, economic and environmental stakeholders, in the decision-making processes implemented at the sub-regional, national and local levels;
- Develop guidelines for the integration of the three dimensions in the different activity branches;
- Promote socially responsible and environmentally friendly investments;
- Develop a common benchmark among the seven countries of the sub-region;
- Promote synergies among the multilateral environmental agreements and determine the operational elements that will guide the implementation of these synergies;
- Establish a closer link between the policy of sustainable development and budget planning processes.

3.2- Sustainable Agriculture and Food Security

Sustainable agriculture is one of the major topics covered by all Member States and with respect to which some have real assets; economic assets and also in terms of support for regional integration and food security in the sub-region. This is the case, for example, in Egypt, Morocco and Sudan.

A sustainable agriculture, which is already developed in some countries, such as Tunisia, could be in the future one of the driving forces of the economy of the sub-region. To achieve this goal, it must take into account the following area of interest:

- Optimization of irrigation techniques for a more rational management of this resource, which is particularly rare and vulnerable in this sub-region;
- Development of a modern agriculture which is competitive, relying on a clean and efficient food processing industry;
- Strong involvement of the private sector within a defined trade framework at both sub-regional and international levels;
- Support small farmers and terroir farming for a sustainable production, a better choice of branches and for improving the yields (mainly in Morocco, Tunisia, Egypt and Sudan);
- Increase investment in local food production;
- Creation of a new liberal trade zone in the sub-region;
- Reduction of pollutants in the chains of production and supply;
- Allow access for local producers to sub-regional and global markets;
- Support the exchange of successful techniques and best practices among States (leading States: Morocco, Egypt and Tunisia);
- Improve access to information and interactions among farmers and scientific and technical services;
- Establishment of technical centers for capacity building targeting institutions and farmers (particularly in the countries that are already advanced in the area, like Morocco, Tunisia and Egypt);
- Evaluation of the constraints and food needs in the sub-region (the entire sub-region);
- Ownership and dissemination of latest agricultural eco-techniques (the entire sub-region);
- Creation of food stocks to overcome years of low production and development of procedures and mechanisms for the management of these stocks (the entire sub-region);
- Contribute to the stabilization of food prices and markets across the sub-region and at the level of each country (sub-region, Morocco, Sudan and Egypt);
- Identification and implementation of nutrition education programs (the entire sub-region);
- Make food security and climate change programs coherent (mainly in Libya, Sudan and Mauritania);
- Optimize investments in livestock production within the framework of the food security policy (case of Morocco, Mauritania and Sudan).

3.3- The green growth, poverty reduction and employment

The Rio+20 conference made green and fair economy one of the main ways to achieve sustainable development. It was thus recommended to all countries “to invest at least 2% of their GDP in sectors that reduce the environmental impact and generate green and decent jobs.” The transition to the green economy requires deep governance reforms.

The eradication of poverty, a major issue for the Rio+20, is one of the most important issues confronting the world today and should be a priority on the agenda of the UN. Despite significant progress in some regions in the world, the international community has not achieved the goals it set. Today, it is obvious
that the number of people affected by poverty in the world continues to grow and that inequality is growing between developed, emerging and developing countries and within each State. Women and children are the most vulnerable groups affected, mainly in the least developed countries, particularly in sub-Saharan Africa.

All the countries of the sub-region have affirmed their commitment to the challenge of the transition to a green and inclusive growth and to make the necessary reforms. These countries are aware that efforts should certainly be made at the local, national and sub-regional levels, but also at the global level, if we want to balance at the long-term the economic development, social requirements and the preservation of the environment.

The construction of this new economic model across North Africa involves the integration of environmental issues into the traditional economic dynamics, especially in the process of market control, not to mention the additive effects of the current global economic crisis, which affects, in some respects, the countries of the sub-region.

One of the first challenges is related to the harmonization of the integration of the principle of inclusion of external factors in the calculation of economic aggregates. This is particularly the case of natural resources and ecosystem services, whose use is rarely taken into account. Often these public goods and services are only mentioned when they are highly degraded or endangered. We can also mention the case of fossil fuels, which are part of the wealth of the sub-region. Changes in their prices in the market depends mainly on the increasing demand from industrialized countries and not the continued depletion of world reserves.

The other big challenge is related to the fact that the standard economic models do not take into account the relationship between the degradation of natural resources, which has immediate impacts on the economy, and the causes of this degradation (desertification, climate change, natural disasters ...). Given the current awareness at the level of the sub-region countries and the impacts of climate change, future economic models will necessarily take this phenomenon into account.

To these constraints are added the costs of reducing greenhouse gas, and also the difficulties of institutional and technical coordination at the national level, in addition to the harmonization of policies across the sub-region. It is therefore important to consider the environment in all aspects of planning and budget cycle at the different levels of decision-making.

Beyond the environmental aspect, this model of standard economic growth, based on unsustainable exploitation of natural resources, is no longer viable in a sub-region facing significant demographic challenges, which carry along a real problem of unemployment, especially among young people, and facing cycles of food scarcity, increasingly regular.

The last major obstacle to the transition to a green economy will be the insufficient capacity of the countries to tackle the challenges and priorities in this area.

To implement their commitments to a transition into a green and inclusive economy, North African countries will require significant investment for the restoration and enhancement of natural capital; sustainable infrastructure; integrated water, forest and land management; biodiversity; renewable and non-conventional energy; and organic production systems. They should encourage businesses and industry to contribute to the creation of green jobs throughout their global supply chains, including support for small and medium enterprises. Each country can launch a comprehensive study on how to ensure transition to green and inclusive economy in order to identify economic and financial trends, investment and job-creation opportunities in the environmental field.

The transition to a green economy will require all countries to: (i) improve knowledge related to clean technology and statistics related to the supply and demand for green jobs, (ii) establish information systems, by country and across the sub-region, able to meet the conditions of a good management in the sector, (iii) map the supply and demand in relation to skills and competencies and identify specialized training programs and institutions and (iv) support, at the local and national levels, programs to reduce poverty and create jobs through the sustainable use of natural resources and environmental safeguarding.

The greening of existing jobs and the creation of new green jobs will be achieved, among other things, through public and private investment in favor of scientific and technological innovation, public works
for restoration, rehabilitation and conservation of natural resources and ecosystems, and social and community services. Creating jobs for young people and the poorest people is a target of a particular concern.

As we mentioned earlier, transition towards a green economy is seen differently by each country. Some countries, such as Morocco and Tunisia, have already set up a number of preparatory mechanisms and accomplished some interesting and leading experiences. Others, like Egypt and Algeria, agreed on the principle and are now testing it in key sectors of their respective economies. So far, Mauritania, Libya and Sudan have neither formal vision nor practical experience underpinned by strategic green growth objectives. However, these countries adhere to the principles and affirm their readiness to take this route.

In this context, some themes are now priorities and may contribute to economic development and job opportunities creation in all countries of the sub-region:

- Energy saving (sustainable energy and energy efficiency);
- Preservation of natural resources and sustainable use of ecosystem services;
- Greening of key sectors such as construction, transport, urban development...;
- Waste treatment, pollution control...;
- Exploitation of all sectors that contribute to the green economy;
- Establishment of green jobs program for young unemployed.

For the countries of the North African sub-region, the green economy could be the opportunity to increase trade among member States and strengthen regional economic integration.

### 3.4- Climate change and reducing disaster risk

Countries of the sub-region are now facing crucial development choices given the tangible impacts of climate change and disaster risks that are still, to some extent, under control. The sub-region has the potentials for real growth demonstrated in recent years by a sustained economic dynamics, with significant results in terms of poverty reduction, despite an adverse global environment characterized by an economic crisis that persists for several years now. However, this process cannot long withstand the effects of climate change taking into account that this area is considered as one of the most exposed areas to the effects of this phenomenon.

Beyond the particularly difficult ecological situation, other factors, such as low economic resilience and strong dependence vis-à-vis the climate, capacities that are still insufficient in terms of investment in adaptation to climate variability, insecurity related to water resources, or the strong energy dependence, make the region vulnerable to real threats to the economy and undermine the sustainability of its development.

Therefore, it is vital that the countries of the sub-region act now in a coordinated manner, adopting a different and sustainable development approach. Acting quickly, especially through programs to reduce greenhouse gas, will contribute to the global effort to mitigate the current deregulation (including global warming) the economic, social and environmental impacts of which are already observed in all the countries of the sub-region. Reducing disaster risks and adaptation to climate change, yet not sufficiently integrated into the development policies of the countries of the sub-region, must be considered as local and national priorities, and be targeted by an integrated, coherent and coordinated program across the sub-region. And in order to act differently, a new way of doing things is needed. Decisions should now be based on sound scientific information integrating all environmental, social and economic variables.

Several suggestions can be made in this regard:

- Putting adaptation and climate risk management at the center of development issues through the design of appropriate policies, programs and projects, but also by providing for monitoring and early-warning structures at different levels of decision;
- Providing for mitigation measures, mainly related to a more sustainable management of land, water and forests and the creation of sustainable urban transport systems. Countries of the sub-region may also benefit from the carbon market by reducing emissions that result from the
destruction and degradation of forests, as well as through renewable energy and energy efficiency;
- Focusing on building knowledge and capacities through the development of databases and analytical tools, and strengthening capacities of national and sub-regional institutions;
- Diversifying funding by exploring all opportunities: dedicated funds (UNCCD Convention), funding mechanisms from the carbon market ...
- Adapting urbanization to climate constraint: demography, pollution, flood risk ...;
- Providing for safety and security for the most vulnerable populations to climate change: food security, social protection, mitigating the loss of productive systems ...
- Protecting sensitive aquatic and terrestrial ecosystems: coastal areas, wetlands, forests, fishing areas ...

3.5- Desertification, drought, soil degradation, and water resources
Erosion, deforestation, water scarcity, drought and desertification are major problems, highly interdependent, which seriously threaten production systems and biodiversity in North Africa. These issues, intensified by climate change, are likely to undermine food security, poverty eradication, and therefore, the sustainable development of the entire sub-region.

The Rio+20 outcome document recognizes the economic and social importance of land and soil, and their contribution to the sustainable economic growth, sustainable agriculture, food security, gender equality, women’s empowerment, and poverty eradication. States have reaffirmed their commitment under the United Nations Convention to Combat Desertification (UNCCD), to implement national, regional and international measures to reduce land degradation and restore degraded lands in especially arable ones.

Significant efforts have been made across the sub-region to diminish the consequences of all these phenomena, and to deal with the causes, especially, reducing the degradation of natural resources in arid, semi-arid and dry sub-humid areas. The main measures taken to combat against desertification in the Maghreb countries are, technical, on the one hand, and they mainly include reforestation, conservation of water and soil, water mobilization, the combat against desertification and rangeland improvement, and legislative and institutional, on the other hand, with the adoption of codes and laws relating to the management of natural resources.

Integrated management of water resources, which was introduced in Morocco and Algeria, more than ten years ago, has helped to change people’s behavior towards the system of royalty. It could then be extended to other sectors. It has also changed the method of governance of water resources into water basin management organizations. Such good practices can be replicated in other countries like Mauritania and Sudan. Manuals and guides for integrated management developed by Morocco and Algeria may be used in this context.

All countries are affected by the natural resources degradation, which requires a number of common measures:
- Prevention and early warning of water and drought-related;
- Setting up minimum rates of soil degradation by 2020, 2030 and 2050;
- Facilitating the adaptation to climate change, through water and soil resources management, while improving disaster risk management and the capacity of water storage;
- Promoting learning through experience and knowledge sharing between countries;
- Ensuring transparency and efficiency in the allocation and use of water resources;
- Defining the general principles, the classification and the status of priority uses of water;
- Defining quantified targets in terms of water quality;
- Maintaining and developing Oases;
- Mobilizing long-term sub-regional and international funding;
- Considering a diversified supply of water, according to sectors of use and according to the varying degrees of water quality;
- Combining the technical approach, on the one hand, and social and cultural approaches, on the other hand, in the field of integrated management of natural resources;
- Identifying various tools (legal, economic and technical) for the quality management of water, soil and forest resources (quality objectives, quality standards and development, scopes of protection and conservation, application of the “polluter pays” principle, etc ...);
- Introducing and disseminate the new information technologies in the domain of management of water, soil and forest resources through the creation of a database and make the software necessary for the operation of the bank available;
- Identifying the institutional measures necessary for the effective implementation of policies for managing water, soil and forest resources, especially in their organizational, legal, economic and financial components.

3.6 - Sustainable energy

The international community reiterated its support to these efforts through the establishment of the appropriate national and local policies to ensure access to energy for the 1.4 billion people in the world that are still deprived. The Rio+20 outcome document emphasizes the need to mobilize funding that helps developing countries to ensure equitable access to their population, while respecting the environment, especially through the use of renewable energies and low carbon technologies.

The year 2012 was proclaimed by the UN General Assembly as the International Year of Sustainable Energy for All. This was an opportunity for the international community to emphasize the importance of technology transfer and dissemination on a global scale, particularly within the framework of North-South, South-South and regional and sub-regional cooperation. A global network of professionals in energy access, and national coordinating committees. The global agenda resulting from this initiative has set three main objectives:

- Universal access to modern energy services;
- A 40% reduction in global energy intensity, and
- A 30% increase in the use of renewable energy in the world.

The Rio+20 outcome document refers to an access to modern energy for all, doubling the energy efficiency rate and doubling the share of renewable energy in the global energy mix. It also emphasizes that the necessary energy transition must take into account the capacities and vulnerabilities of each country.

In North Africa, renewable energy is a viable alternative to fossil fuels. The potential of sustainable energy sources is able to meet current and future energy needs of the sub-region countries, and to support sustainable economic growth. However, it should be noted that despite a growing demand for energy in all countries, there are considerable differences both in terms of needs and energy supply, and in terms of use of renewable energy and energy efficiency policy. The supply is largely dominated by fossil fuels and the significant renewable energy potential remains untapped. If Algeria, Tunisia, Morocco and Egypt have made an important step towards a transition to renewable energy, Mauritania, Sudan and Libya fall far behind in this area. Consequently, the recommendations made in this area will vary according to each country.

On the sub-regional level, it is important to work in the following directions:

- Reducing energy dependence on fossil fuels by optimizing the use of renewable energy and adopting effective policies of energy efficiency;
- Improving the performance of renewable energy by establishing a suitable environment for private investments;
- Enhancing regional cooperation and trade in the field of sustainable energy;
- Increasing the capacity of training, and of scientific and technological research;
- Harmonizing and coordinating policies;
- Strengthening regional cooperation;
- Establishing incentives for investments in the clean technology research;
- Supporting the diversification of the energy mix and energy efficiency in countries of the sub region.
3.7- The integration of education in a sustainable vision

The outcome document adopted in Rio includes a chapter dedicated to education, addressing, in particular, the issue of access to education for all, presented as an essential condition for poverty eradication, gender equality and for human development, but also, and for the first time, higher education as a key driver for change towards sustainable development. The document recommends that institutions go beyond traditional programs and disseminate transversely sustainable development in all their disciplines. There is also a reference to the importance of training and the ability to act in an exemplary manner, both must be shown in higher education institutions.

These founding ideas are suggested largely, or even entirely owned, by the countries of the sub-region, based on performance and the level of integration of environmental issues into the educational programs of each country. Public and private training institutions, especially engineering schools and universities must now rely on this approach to promote sustainable development and to help achieve the transition through behavior change and technological innovation. This is far more urgent to do than since the education systems of most countries in the sub-region have shown their limits by the inability to solve the problem of youth unemployment, especially graduates with higher degrees. The slogan of the conference “The future we want” will be meaningful only if the dynamics of balance between the educational system and the labor market is engaged positively and irretrievably.

Universities in the sub-region should serve as examples of good practice by enrolling sustainable development in their programs and in all disciplines taught, but also in the design of physical environments (facilities, campus, infrastructure …). Programs of sub-regional and international cooperation, including academic partnerships, scholarships, academic exchanges, should be carried on to anchor the transition towards sustainable development in all countries. Finally, technological innovation and scientific research in different countries should be backed in the direction of promoting sustainable development.

3.8- Sustainable management of natural resources and of biodiversity

The maintenance of biodiversity and the sustainable management of natural resources are an essential component of sustainable development. On biodiversity, and despite pledges by the international community through the Rio Convention (Convention on Biological Diversity, CBD) and the Nagoya Conference in 2010, the decline of biodiversity is accelerating. North Africa is no exception to this general trend, as is has been reported in various national reports. Therefore, it is urgent to undertake strong actions underpinned by quantified targets by 2020, 2030 and 2050.

Experience and studies already conducted in some countries, such as Morocco, Tunisia, Egypt or Mauritania, show that the preservation of biodiversity is not only an environmental or an ethical issue. The loss of ecosystem services provided by this biodiversity induces economic, social, food, and sanitary impacts, destabilizing the entire equilibrium of the sub-region and of the whole planet. Rigorous programs of scientific research should be established in all countries in order to assess the ecological and economic value (cost/benefit) of biodiversity and of natural resources and to propose management options tailored to the resilience of ecosystems and based on the services provided.

In addition, information gathered across the sub-region demonstrates the importance of traditional knowledge and practices of indigenous communities in the conservation and sustainable use of biodiversity and natural resources. This component will benefit from a specific regional program to identify, test and develop all of this information in order to halt and reverse the loss of biodiversity. Actions to implement targeted policies on inventories and natural resources management should be designed and implemented.

3.9- Sustainable cities and management of pollution

Many forecasts made by specialized agencies indicate that by 2050, 2/3 of the world population will be living in cities. This transformation will lead to major changes in terms of local governance. The Rio+20 document devotes a paragraph to "cities and human settlements". It recommends participatory processes for urban development, including the poor. It mentions the importance of the issues of urban planning, access to basic services, heritage and historic centers, which are priorities of the French urban cooperation. Finally, it recognizes the essential role of local authorities.
In North Africa, the urban dynamics are increasing, driven by large cities where the worse situations of poverty, on both environmental and social point of view, are often concentrated. For example, in Egypt, half of the urban population lives in slums. The poor living conditions in the slums, including the challenges related to access to safe drinking water, sanitation problems and wild industrial pollution still persist despite the scattered initiatives undertaken by the Government. This situation prevails in varying degrees of severity, in major cities of North Africa. The need for a profound transformation of the mode of urbanization is felt and was expressed in most of the national reports. This new design incorporates new players and sees the role of states move closer to regulatory mechanisms and less about practical management. Democratic process structures this vision, which is found on all levels, from rural towns to major urban centers. The future sustainable management will proceed from the counties and not from an enforcement of a general policy of the State. The specificity of each country, its potential, the dynamics of its population and its civil society, their needs, their economic capacity … will structure its future vision of sustainable development.

In the sub-region, some similarities can be found, especially between the coastline towns, cities under strong demographic pressures, cities whose development is subject to weather hazards (desertification, floods …). Future strategies should take account of these similarities but also nuanced approaches based on differences. The research, training, and innovation programs must be developed to support this vision. The classic model of urbanization that was the basis of the emergence of large cities in the sub-region, with a zoning by specialized activity, has shown its limits since it creates social disruption and environmental damages. The building itself and the ownership of transportation modes are involved in the transition towards sustainability. The planning policy and urban patterns must now take into account the expected impacts of climate change and the resilience of territorial spaces. Finally, partnerships, twinning and exchanges between the cities of North Africa should be strengthened to support the implementation of this vision.

In parallel, significant investments must be mobilized to support the intelligent and sustainable management of solid and liquid waste. A Sub-regional action plan against marine waste must be implemented, particularly in Morocco, Mauritania, Egypt and Tunisia.

Mining (Mauritania) and oil and gas (Egypt, Algeria, Sudan and Libya) activities will be subject to assessment and mitigation programs regarding environmental and social impacts at all levels.

3.10- Sustainable Development Goals

The proposals of Rio+20 are that all countries will have to implement these goals. The idea to do so under the principle of a common but differentiated responsibility, which was suggested by the South countries, was finally rejected by the developed countries. However, we recall that the adoption of these sustainable development goals involves significant public and private investments.

The commitment on the definition of quantified targets and deadlines was taken by all the countries in the sub-region. Although basic services, water, energy and foodstuffs are priority concerns for North Africa, all the topics covered in this chapter shall be subject to tangible proposals for each country and sub-regional level, as part of the consultation process open to all stakeholders in sustainable development. Emerging themes such as climate change, green and inclusive growth will benefit from a specific interest. The SDG reinforces the MDGs in an emergency context of poverty reduction and control of climate change impacts.

On the sub-regional level, it is important to enshrine, as it has been done successfully in other parts of the world, the right to universal access to basic services, water, energy and foodstuffs for all populations in North Africa. This will result in a stronger commitment from governments and mark a necessary strategic proximity, especially in the current difficult situation of post-'Arab Spring' management.

The other important side of the implementation of SDG is the definition given by the sub-region countries for the innovative financing mechanisms that are able to overcome the withdrawal of the international community and the broken promises by developed countries during various international meetings.
3.11 - Capacity building and gender equality

Capacity building as it was defined in the Rio+20 document includes institutional, planning, management and control features. Strengthening Technical Cooperation (North/South, South/South and triangular) and human resources development (training, experience sharing and knowledge transfer) should be the basis for the approach to be developed by sub-region countries. An approach that will lead to the effective participation of all stakeholders, from the local to the sub-regional level, in decision-making related to sustainable development in the sub-region.

Countries in the sub-region need support from all United Nations agencies and other relevant organizations for capacity building, in order to implement inclusive, and thus, efficient economies in optimizing the use of their resources. In this sense, it is necessary to: (i) sharing between countries in the sub-region sustainable practices (techniques and knowledge) in the various economic sectors; (ii) improve the technical capacity and of financial mobilization to integrate risk mitigation, (iii) support the technical and scientific cooperation for the transition towards an efficient and sustainable economy, and (iv) the development of financial and technological support from developed countries and international institutions, (v) strengthening the capacity of key stakeholders (public, private, local authorities and civil society) on some key issues such as CDM, Carbon market or Green Business; and (vi) assist companies in CSR.

Regarding gender, Rio+20 document emphasizes the vital role of women in sustainable development, and urges countries to accelerate the implementation of the international community commitments relating to a full and equal participation and leadership of women in the development fields, in accordance with the provision of Convention on the Elimination of all Forms of Discrimination Against Women, the 21 Agenda, Beijing declaration, platform for action and the Millennium declaration. While progress have been made to establish gender equality in some fields, in particular regarding access to education, the analysis of reports shows that the potential of women that participate and contribute to sustainable development as leaders and front actors is not yet fully exploited. Efforts should be made by countries of the sub-region, namely Libya, Egypt and Sudan, to ensure empowerment of women (economic and political participation) in all spheres of the society. Some successful experiences in this field, in particular in Tunisia and Mauritania, are worth sharing in the sub-region.

3.12 - Regional integration

Regional integration is an opportunity for a real economic growth since it allows orient resources flows from an economic activity to another one, and from a productivity level to another. The Economic union in the sub-region of north Africa, despite its extraordinary assets, is not yet an economic, social and environmental success. To date, countries of North Africa has not yet took advantage from relations between them as markets and supply sources, thus they have not yet achieved the potential benefits in terms of economic growth and employment. Trade between countries of the region represent less than 3% of their whole volume of exchange, which is the least level regarding the whole regional trade agreements of the WTO. In addition, except from Mauritania, all countries give priority to the export market of the European Union, rather than Sub-Saharan Africa markets. Meanwhile, the success of the recommendations set forth by theme and by guideline will determine the success of the integration of this sub-region. The free movement of labor and capital between borders of these countries can lead to job creation and sustainable growth in the region, and also increase competitiveness and the weight of north African countries at the international level.

Trade exchange and win-win partnerships can cover all mentioned areas: energy, water, sustainable agriculture, food security, technology and know-how transfer, and also sustainable financing mechanisms. Economy of scale to be achieved through this regional integration will allow the region a better positioning in the international market. The fact that some countries belong to different regional communities is not an obstacle, it can be used as an asset to enhance the development of the region.

Besides, defining the bases of a new partnership between north African countries, for an open and secure economic, social and environmental area will boost the capacities of these countries to a more efficient transition towards sustainable development. The cumulated achievement by a sub-regional body such as MAU, in particular in terms of strategic planning and coordination, must be capitalized and strengthened. Sustainable development goals for the region may be identified, supported and assessed by this sub-regional structure, with the support of community-based international organizations.
such as the United Nations. It is a matter of fact that the economic achievements of some countries are not positively capitalized by the least developed countries because of the absence of a common regulate and transparent economic space. As a comparison, the area of the European Union, since it is tangible and regulated, has benefited to countries with weak economies (Portugal and Ireland), this impact was inexistent within the Maghreb area.

In this context, we can suggest to: (i) revive the sectoral councils within the MAU to target the integration of priority sectors into economic, social and environmental fields; (ii) improve data collection, with are today scattered among various institutions, and to analyze them at the level of the MAU; (iii) strengthen under the auspices of MAU, human and financial competencies of the various specialized observatories; (iv) target the sub-regional integration through priority development sectors; (v) strengthen through the MAU the inter-regional cooperation and the international cooperation.
The Rio+20 conference was a real opportunity and hope for the sustainable development of the sub-region of North Africa. It should be implemented through significant changes in terms of: (i) creating and operating institutional and strategic frameworks at the regional and national levels; (ii) transition towards a green and inclusive economy underpinned by targeted programs aiming at reducing unemployment, poverty and hunger; (iii) definition and implementation of clear and measurable sustainable development goals that allow a better integration of the three dimensions: economic, social and environmental; and (iv) regional integration to the benefit of a sustainable economic dynamics for the whole region.

This study aimed at analyzing, on the basis of national and regional reports established as a preparation for the conference of Rio+20, and the initiatives in progress within the different countries, the implications of the outcomes of the Conference of Rio+20 on the sustainable development in North Africa.

This paper reviewed all priorities and concerns of each country and at sub-regional scale with an aim to draw a sub-regional profile of the sustainable development, and to shed light on the major issues that have a direct impact on sustainable development.

The relevant region is currently facing major and varied social, economic and ecologic challenges, despite its huge potentials, its socio-cultural cohesion, some similarities in economic models carried on, the resemblance between the key features of drawn ecological profiles. The first asset is its extraordinary human potential (a population mostly young and educated), while the second asset is the natural resources (gas, oil, mines, fishing, soil and landscapes). The combination of these assets in a new vision of green and inclusive economy, backed by a sustainable management of natural resources of the sub-region and meeting the social needs of the population, will help overcome the future development challenges in North Africa.

The answer given by Rio+20 outcome document to the recommendations elaborated by the countries of the sub-region enhances the liaison between these countries and the commitments of the international community and strengthens the political will of the countries to implement these recommendations. Challenges were identified according to three categories: (i) common issues to all countries; (ii) common issues to countries with similar profiles; and (iii) specific issues to each country. These issues were addressed at the economic, social and environmental scales.

On the social point, except from Mauritania and Sudan, countries of the sub-region have a regular human development, with substantive achievement in the fight against poverty and considerable progress towards the achievement of the millennium development goals by 2015. Nevertheless, this should not overshadow some constraints such as unemployment, particularly among youth, inequalities between social categories and between regions, the increasing migratory flows or food insecurity. We also mention the poor integration of sustainable development in the education system, which is a major hindrance to behavior changing, comprehension and ownership of these challenges by the current and future young generations.

On the economic front, a number of constraints hinder the regional dynamics, including: (i) vulnerability of economies towards climate hazards; (ii) excessive dependence on natural resources; and (ii) the limits to the economic growth that is unable to create enough jobs.

On the environmental scale, the region as a whole is facing a devastating desertification, that destroys the biological potential of soils and the consequences of which are water scarcity, decrease in land productivity, loss of biodiversity and degradation in the quality of life. The countries witness an increasing energy demand and are highly dependent on fossil energy. The huge potential in renewable energies is yet untapped. Climate change is likely to affect in the short term the way of life of the population and accelerate natural resources degradation. Greenhouse gas emissions, yet very important, change in rainfall and temperatures, the risks of rising sea levels, the more frequent extreme weather events, are all...
visible signs and challenges to be addressed for this region. Natural resources and biodiversity are threatened and littoral and coastal zones are subject to high human pressure, with important risks in terms of pollution and flooding.

Efforts made in terms of sustainable development in the region remain insufficient for some countries (Mauritania, Sudan and Libya) despite the political will and the implemented measures that are often unoperational. Political, economic and social pressure on the one hand, and pressures relating to technical and/or financial capacities, on the other, explain to some extent the delay in comparison with other countries. The analysis highlights the key role that can be played by the regional integration in order to achieve sustainable development for the sub-region. To make it happen, it is of utmost urgency to launch a process of institutional and regulatory adaptation and harmonization in all key sectors. New bases should be defined in this context, especially in terms of strategic partnership, coordination, monitoring of policies, experience, technology and competency sharing, and capacity building.

None of the Maghreb economies is now sufficiently developed to ensure its own prosperity. They can only reach it through their unity. Capitalizing reciprocally on strengths and potential of each country must be subject to further reflection and a win-win partnership for the benefit of economic development throughout the region. The alleviation of disparities between countries, yet striking in some fields, can be achieved through a successful regional integration.

In this context, major issues strongly relating to sustainable development issues in the region were discussed and compared to Rio+20 recommendations, taking into account the assets, constraints and potentialities of the countries.

Regarding the overall institutional framework, the 67th session of the UN General Assembly recently adopted the strengthening of the means of the UNEP, a suggestion endorsed by most of the countries in the sub-region. North Africa should consider the creation of a common zone comprising all the seven countries. This reflection can be engaged through MAU and other regional communities to which belong these countries. A close coordination with the already existing bodies in the sub-regional scale should be sought to strengthen technical competencies. In accordance with Rio+20 recommendations, each country will take in charge the strengthening of existing institutions and organs, at all levels (from national to local). ECA will go further supporting Member States in the elaboration, monitoring and assessment of policies aiming at achieving the sustainable development goals.

For the strategic framework, it is worth mentioning the poor implementation of sustainable development policies and their inconsistency with sectoral and global policies. This lack of a holistic approach had a heavy consequence, not only on the political level across the countries of the region, but also at economic and social levels, a consequence mainly borne by the population, in particular the most vulnerable categories. To address these shortcomings, countries should be more efficiently involved towards a further integration of the three pillars of sustainable development. This commitment requires the establishment, adaptation and strengthening of a number of institutional, regulatory and strategic mechanisms both at the level of each country and at the regional level.

For the transition towards a green and inclusive economy, the suggested recommendations depend on the achievements already accomplished by each country. However, the priority should be given to knowledge improvement, technology transfer, economic assessments at the macro, meso and micro levels, to the mapping of offer and demand of jobs, and to the support of innovative financing initiatives. All in a spirit of reducing poverty and insuring food and energy security.

In order to take into account the climate change impacts, which is a major challenge for the sustainable development of the sub-region, it is becoming a matter of urgency to put in place adaptation and mitigation programs to the climate impacts by the integration of climate risks in the relevant policies, programs and projects, and also by creating monitoring and early-warning structures at all decision-making levels (national and sub-regional). Efforts already made in agriculture, energy, transportation and industry should be extended and strengthened. The exploration of innovative and suitable financing mechanisms and the development of provisional plans for the management of risks and disasters are priority sectors.

The important role of the United Nations Agencies and regional and sub-regional organizations (such as MAU) to support countries of the sub-region, is considered as crucial. Partnerships at the sub-regional
and international levels will be signed to allow capacity building of actors and facilitate clean technology transfer. Innovative funding should be sought through own funds of each country, enhancing the public-private partnership, exploring mechanisms relating to major agreements, carbon markets, and clean development mechanisms.

Finally, guidelines have been identified. They shape the strategic guideline for sustainable development in the sub-region, and include the following sectoral and cross-cutting themes:

- Sustainable agriculture and food security;
- Green growth, reduction of poverty, and employment;
- Climate change and disaster risk reduction;
- Desertification, drought, soil degradation and water resources;
- Sustainable energies;
- Sustainable management of natural resources and of biodiversity;
- Sustainable cities and pollution management;
- Effective integration of the three pillars of sustainable development;
- Integration of education system in the sustainable development strategies;
- Human capacity building and gender mainstreaming;
- Adaptation of institutional, strategic and legal frameworks;
- Mobilization of funding and partnerships;
- Technology development and transfer;
- Sustainable development goals;
- Regional integration.
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### Appendix 1

<table>
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<tr>
<th>Institutional framework</th>
<th>Policies and Strategies</th>
<th>Implementation tools</th>
<th>Sustainable Development Goals</th>
<th>Green Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Algeria</strong></td>
<td>Strengthen and adapt the institutional and legal frameworks to be more appropriate for emerging challenges</td>
<td>Develop a strategy for the effective integration of the three pillars of SD</td>
<td>Strengthen mechanisms of development and transfer of clean technologies</td>
<td>Increase the share of renewable energies in the electricity production (40% in 2030)</td>
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<tr>
<td>Creation of many management and regulation agencies and bodies</td>
<td>Act N° 04-09 of August 14, 2004 relating to the promotion of renewable energies and electricity efficiency</td>
<td>Promote an integrated approach of planning of sustainable cities construction by clean and effective transports, high-performing communication networks and a better quality of life. Draw up and implement programs to reduce unemployment, to be funded through hydrocarbon revenues</td>
<td>Capacity building in terms of handling challenges relating to climate change and green economy</td>
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<tr>
<td>100 million USD on equities to reduce greenhouse gas emissions by sequestering and storing carbon in geological structures at Ain Salah (South of Algeria). A 0.5% tax will be levied on oil taxation for renewable energies. Implementation of programs to support green and inclusive growth. Strengthening cross-sectoral approach and integrated and sustainable management of renewable energies.</td>
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</table>

**Note:**
- **SD** refers to Sustainable Development.
- The table lists strategies and goals aimed at achieving sustainable development and green economy in Algeria.
<table>
<thead>
<tr>
<th>Country</th>
<th>Implications and Challenges</th>
<th>Actions and Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>Severely affected by climate change. Many projects and programs are already in progress (adaptation and mitigation)</td>
<td>Strengthen and adapt the institutional and legal frameworks to be more appropriate for emerging challenges. Develop a strategy for the effective integration of the three pillars of SD. Promote an integrated approach of planning of sustainable cities construction by clean and effective transports, high-performing communication networks and a better quality of life. Develop and implement a strategy for sustainable tourism by 2020. Draw up and implement programs to reduce poverty and unemployment, to ensure food security, funded through hydrocarbon revenues. Establish capacities in terms of climate change monitoring, early-warning, and forecasting. Build capacities in terms of climate change monitoring, early-warning, and forecasting. Strengthen mechanisms of development and transfer of clean technologies. Create a growth that generates jobs. Take into account impacts related to climate change (water resources, agriculture, and energy). Support the integration of sustainable development in the education system. Make the most of the know-how and traditional practices to halt and reverse the loss of biodiversity. Improve sustainable production and consumption patterns. Strengthen tax policies in favor of green economy. Establish cross-sectoral programs to promote sustainable green jobs aiming at eradicating precariousness and poverty.</td>
</tr>
<tr>
<td>Libya</td>
<td>Absence of any strategic vision to encourage green economy. Strong dependence of the economy on hydrocarbons</td>
<td>Create and adapt the institutional and legal frameworks to be more appropriate for emerging challenges. A strong political guidance from Libyan government in favor of sustainable development. Identify specific measures to promote sustainable development at all levels of decision-making. Develop a strategy for the effective integration of the three pillars of SD. Develop a strategy for the management of climate change impacts. Establish a coherent and solid partnership with the United nations agencies, funds and programs, including financial and trade institutions. Develop and implement a program to build capacities for a better consideration of issues relating to climate change and the integration of green economy. Create a growth that generates jobs. Support the integration of sustainable development in the education system. Creation of information and exchange networks on sustainable development. Strengthen the education system and the adequacy training-employment. Develop an integrated vision for the promotion of green and inclusive growth. Establish information and awareness program on the positive effects of green economy. Establish an environmental tax policy (oil resources) in favor of the transition towards green economy. Encourage strategic fields of green growth to develop the industry.</td>
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<tr>
<td>Morocco</td>
<td>Mauritania</td>
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<tr>
<td><strong>Morocco</strong> Set up of a wide range of technical, legal, institutional, financial instruments to support the environmental policy, sustainable development and the promotion of green economy.</td>
<td><strong>Mauritania</strong> Institutional framework for sustainable development still insufficient and incoherent. High vulnerability to climate. Emerging challenges not included. Documents silent on the funding of SD. Technology development and transfer are not included. Many tools to prepare the transition towards green economy have been developed but are not implemented or integrated within policies. Achievements in plastic waste handling.</td>
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<tr>
<td>Strengthen the institutional and legal framework to be more appropriate for emerging challenges, in particular for the transition towards a green and inclusive growth.</td>
<td>Create and adapt the institutional and legal frameworks to be more appropriate for emerging challenges.</td>
<td></td>
</tr>
<tr>
<td>Develop a strategy for the effective integration of the three pillars of SD Promote an integrated approach of planning of sustainable cities construction by clean and efficient transports, high-performing communication networks and a better quality of life. Develop and implement a strategy for sustainable tourism by 2020.</td>
<td>Develop a strategy for the effective integration of the three pillars of SD.</td>
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<tr>
<td>Strengthen technical and financial partnership for a better preservation of biodiversity. Support the preservation of biodiversity (soil seed banks and biosecurity plans)</td>
<td>Develop a strategy for partnership, capacity building, and funding mobilization for a better integration of SD challenges Mobilizing financial resources and building capacities for a better protection of biodiversity.</td>
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<tr>
<td>Integrate efficiently the issue of gender equality and empowerment of women within the sustainable development process Create a growth that generates jobs Assessment of the costs of biodiversity loss Increase the share of renewable energy within the national production of energy Strengthen synergy between implementation processes of major Rio agreements (biodiversity, climate change, fight against desertification) Make the most of the know-how and traditional practices to halt and reverse the loss of biodiversity.</td>
<td>Accelerate the achievement of the MDGs Develop an appropriate information system Create a growth that generates jobs Creation of institutions in charge of environment technologies and applied research in sustainable development Strengthen the role of universities and technical training centers in promoting sustainable development. Cartography of climate vulnerability by 2030 and 2050 Assess desertification and climate change costs</td>
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<tr>
<td>Improve sustainable production and consumption patterns Support companies towards green economy Encourage strategic fields of green growth to develop the industry Establish cross-sectoral programs to promote sustainable green jobs aiming at eradicating precariousness and poverty</td>
<td>Develop an integrated vision to encourage green and inclusive growth Establish information and awareness programs on the positive effects of green economy. Update and adopt existing tools and instruments Strengthen policy of plastic waste handling, as a basis for a policy to encourage green economy. Establish cross-sectoral programs to promote sustainable green jobs aiming at eradicating precariousness and poverty</td>
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<tr>
<td>Important economic role of natural resources (fishery and mining resources)</td>
<td>Design and implement programs to eradicate poverty, to ensure food security, to reduce unemployment, in particular among youth, funded through mining activity revenues.</td>
<td>Fight against illegal and unregulated fishing (IUU fishing) by adopting and implementing efficient tools in accordance with international law. Strengthen the protection program of the city of Nouakchott, as a basis of a &quot;sustainable cities&quot; vision to be extended to other urban centers such as Nouadhibou, Atar and Kiffa. Make the most of the know-how and traditional practices to halt and reverse the loss of biodiversity.</td>
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<tr>
<td><strong>Tunisia</strong> Set up of many political and technical entities and institutions adapted to take into account sustainable development issues. High performance of research/development institutes in the field of SD. Predominance of sectoral approaches instead of integrated approach.</td>
<td>Improve the institutional framework so as to take into account emerging challenges. Develop a strategy for the effective integration of the three pillars of SD. A better integration of environment within public policies. Strengthen local development and decentralization. Develop and implement a strategy for sustainable tourism by 2020. Establish a strategic intelligence system on sustainable development. Develop new exchange and cooperation partnerships and mechanisms. Support the preservation of biodiversity (soil seed banks and biosecurity plans).</td>
<td>Insufficient command of information relating to environment and sustainable development. Strengthen existing information systems for a better consideration of new challenges. Create an employment-generating growth. Strengthen the follow-up of climate change impacts (desertification, water resources, biodiversity and industry). Encourage synergy between implementation processes of major Rio agreements (biodiversity, climate change, fight against desertification). Make the most of the know-how and traditional practices to halt and reverse the loss of biodiversity.</td>
</tr>
<tr>
<td></td>
<td>Improve sustainable production and consumption patterns. Support companies towards green economy. Encourage strategic fields of green growth to develop the industry. Adapt to technology innovation and development (clean technologies). Establish cross-sectoral programs to promote sustainable green jobs aiming at eradicating precariousness and poverty.</td>
<td></td>
</tr>
<tr>
<td>Sudan</td>
<td>Create and adapt the institutional and legal frameworks to be more appropriate for emerging challenges</td>
<td>Set up a sustainable development strategy by 2020 with a focus on the efficient integration of the three pillars of SD within sectoral strategies</td>
</tr>
</tbody>
</table>

- High economic growth
- Great agricultural assets
- High climate vulnerability
- Over-exploitation of natural resources
- Absence of any vision to encourage sustainable development