

kingdom of Morocco



SUSTAINABLE DEVELOPMENT IN MOROCCO

Achievements and perspectives
From Rio to Rio +20

June 2012

CONTENTS

1	Preface
4	Executive summary
8	Good governance, from representation to participation
8	1. The cultural frame of reference of the kingdom
8	2. Evolution of national governance: the constitutional reform
9	3. Evolution of governance at the regional level : the territorial approach
10	4. Evolution of the role of the civil society
12	5. Global governance and sustainable development : implementation
14	Economic pillar: reforms with sector-based strategies
15	1. Reinforcing economic framework
17	2. Green and inclusive methods applied to brown economy
21	Social pillar: progressive transition
21	1. Development of the health sector
23	2. Education : challenges of generalisation and quality
26	3. Fight against poverty and exclusoin
28	4. Opening up rural areas and mastering urbanisation
29	Environmental pillar
30	1. Irreversible commitment: implementation of environmental action is on trakc
34	2. Climate : local impact, global challenges
35	3. Water: integrated management
36	4. Forests and biodiversity: a wealth with steady efforts to preserve it
39	5. Between the sea and the ocean:morocco a coastal country
41	Signet non defini
41	1. The national charter for environment and sustainable development
42	2. Morocco's green economy: how transition is taking place?
43	3. Green growth and the eradication of poverty: morocco's vision
47	Conclusion
48	Appendix: Recommendations from the Forum of the Young Reporters

The Kingdom of Morocco is approaching Rio+20 with lucidity, hope and energy.

The conference requires lucidity, considering the immense task at hand – ensuring that the Earth remains a viable and hospitable place for humans to live in the 21st century. Progress has been made since the 1992 Rio Conference. People are more aware of the risks resulting from consumer-based lifestyles and the dangers of short-term thinking. We have become familiar with the urgent need to mobilise people and governments in order to respond to climatic, demographic, environmental and social challenges.

As **His Majesty King Mohammed VI** insightfully stated at the Johannesburg Conference that «the limited progress achieved since the adoption of 'Agenda 21' in implementing the Rio Declaration, has given rise to pressing questions about what went wrong and prevented the agenda from being carried out thoroughly.» He also asked a question which is relevant now more than ever: «what has the international community done to fight dire poverty which affects more than 25% of the world population and to cater for the vital needs of human beings? [...] after the different tremors and the violent crises which shook the world recently, is everybody convinced now that fostering sustainable development is everyone's responsibility?» (Excerpt from His Majesty King Mohammed VI's speech during the Johannesburg Summit in 2002).

The two key questions of «the institutional framework of sustainable development» and «the green economy in terms of poverty eradication and sustainable development» will set the agenda at Rio+20. Our country can productively contribute to the international community's progress in this matter.

It is therefore with hope that we look forward to this conference, as the process initiated in 1992 at the Rio Summit has proven successful thanks to the actions of governments, NGOs, ethnic and religious communities, local authorities and businesses. The UN has also played a major role, in terms of this process, by giving all stakeholders the opportunity to be heard prior to the Conference, thereby bringing together the broadest possible range of opinions on sustainable development.

The energy invested in these questions by our country since the beginning of the 21st century demonstrates our firm commitment to sustainable development:

- The constitutional reform announced on 9 March 2011 by His Majesty King Mohammed VI, and adopted by referendum on 1 July 2011, enshrines the values of equity, ethics, plurality and diversity. It also guarantees

«individual and collective freedoms and the right to exercise these freedoms, as well as the strengthening of all aspects of human rights: political, economic, social, cultural, environmental and developmental.» In other words, the economic, social, environmental and cultural «pillars» of sustainable development are in turn the very cornerstones of the Kingdom of Morocco.

- The National Charter for the Environment and Sustainable Development has already given our country the legal and ethical means to protect the environment. Furthermore, Article 152 of the new constitution extends the scope of the Economic and Social Council to include environmental affairs. The Council now hands down its opinion on general national economic and sustainable development policies, giving each and every Moroccan a say in their development.

Our day-to-day drive will be enshrined in the National Sustainable Development Strategy, which is currently being prepared. This strategy will include the contributions of all the Kingdom's stakeholders and will constitute the country's future framework.

This shared momentum is why we think it appropriate to highlight the public policies that drive us forward as well as all of the initiatives undertaken by companies, regions, cities, villages, associations, communities and individual citizens. All of this demonstrates our commitment to building a sustainable society in our country which is hit particularly hard by climate change and water stress.

While Morocco's commitment to sustainable development combines on a global level with those of the international community, it also reflects a responsibility to its own population. Our Kingdom is composed of environmentally delicate and wet areas such as deserts and oases, as well oceanic landscapes bordering the Mediterranean. Moroccans have forged a civilisation based on hospitality and independence, while the Kingdom's youth is determined to end poverty and achieve sustainable prosperity.

Just as our ancestral culture is built on a love of nature and a belief in the virtue of simplicity, Moroccans themselves are becoming one with the cause of sustainable development.

LIST OF ACRONYMS

ABH	Hydraulic Basin Agencies
ADEREE	Agency for the Development of Renewable Energy and Energy Efficiency
AMDI	Moroccan Investment Development Agency
ANAPEC	National Agency for the Promotion of Employment and Skills
CCR	Advisory Committee on Regionalisation
CDB	Convention on Biological Diversity
CFL	Compact fluorescent lamps
CGEM	General Confederation of Enterprises in Morocco
CIE	Inter-Ministerial Commission for Water
CMPP	Centre for Cleaner Production in Morocco
CNEDD	National Charter for the Environment and Sustainable Development
CNRST	National Centre for Scientific and Technical Research
CRI	Regional Investment Centres
CSR	Corporate social responsibility
DPM	Maritime Public Domain
EIA	Environmental impact assessments
EIC	Energy investment company
ENPSF	National Family Planning Programme
EU	Environmental upgrade
GDP	Gross domestic product
GHG	Greenhouse gases
HSRL	High-speed rail line
IAR	Immersion of artificial reefs
IER	Equity and Reconciliation Commission
IGA	Income-generating activities
INDH	National Initiative for Human Development
IPCC	Intergovernmental Panel on Climate Change
MAD	Dirhams
MASEN	Moroccan Agency for Solar Energy
MDG	Millennium Development Goals
MENA	Middle East and North Africa
MENESFCRS	Ministry of Education, Higher Education, Professional Training and Scientific Research
MHO	Mandatory health insurance
NAPCD	National Action Programme to Combat Desertification
NES	National Environment Strategy

NES	New energy strategy
NGO	Non-governmental organisation
NICT	New information and communication technologies
NLG	Non-liquefied gas
NRDP	National regional development plan
NSDS	National Sustainable Development Strategy
OCP	Office Chérifien du Phosphate (national phosphates company)
OECD	Organisation for Economic Cooperation and Development
ONCF	Office National des Chemins de Fer (national railway operator)
ONE	Office National de l'Electricité (national electricity utility)
ONOUSC	National Office of Social and Cultural University Programmes
PAGER	Programme for the Grouped Supply of Drinking Water for Rural People
PCB	Polychlorinated Biphenyl
PDAIRE	Master Plan for the Integrated Development of Water Resources
PERG	Global Rural Electrification Programme
PNA	National Sanitation Programme
PNAL	National Coastal Management Programme
PNAP	National Priority Action Plan
PNDM	National Household Waste Management Programme
PNRR	National Rural Roads Programme
RAMED	Plan for Medical Assistance to the Economically Deprived
RDP	Regional development plans
RE	Renewable energy
SAP	Structural adjustment programme
SBEI	Sites of biological and ecological interest
SEEE	Secretariat of State for Water and the Environment
SEPS	Sustainable Environmental Protection System
SHM	Supermarkets and hypermarkets
SME	Small and medium-sized enterprises
SNTL	Société Nationale des Transports et de la Logistique (national transport and logistics company)
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

Executive Summary

Rio 20 is an anniversary. Twenty years of efforts to carry out sustainable development, particularly through Agenda 21 and the 3 Rio Conventions. The Kingdom of Morocco was also keen to take stock of the past 20 years.

Located on the southern shore of the Mediterranean in

north western Africa at the gates of Europe (Gibraltar Strait), on the western edge of the Arab-Muslim world, Morocco has always been a hub of civilizations and today a crossroad of major regional groupings.

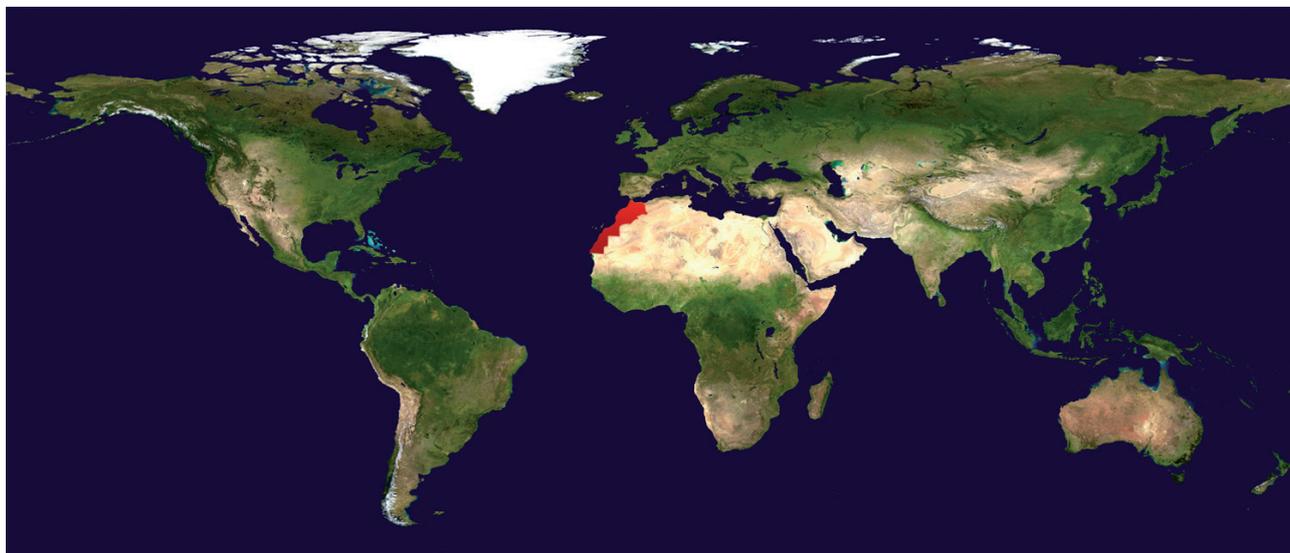


Figure 1: Morocco's Geographical Location

During the past 20 years, Morocco had to develop in a context marked by vulnerability and limiting factors such as water availability which was exacerbated by climate change effects and energy dependency (the cost of

energy bill amounts to 11% of GDP). Water availability dropped from 2560 m3 per capita per year in 1960 to 730 m3 per capita per year in 2010.

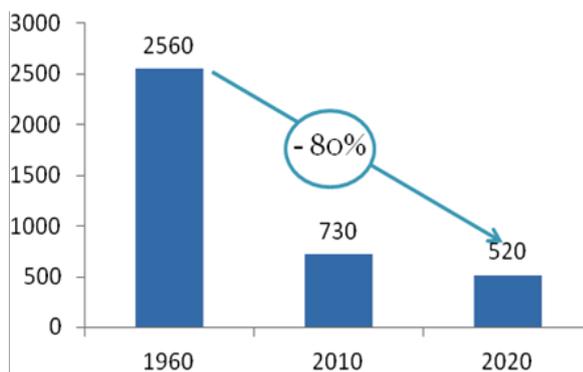


Figure 2 : Change in the availability of water resources (m3 per capita per annum)

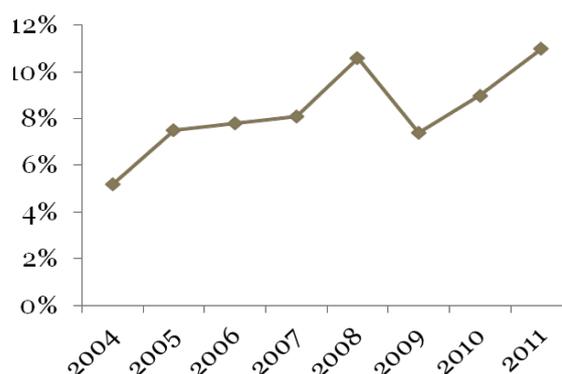


Figure 3: Change in the energy bill as a % of GDP

However, capitalising on their liberal multi-decadal orientation, Morocco since nearly twenty years has significantly increased the pace of its achievements gradually transforming itself into a large open-air project

thanks to the concomitant launch of structural projects of key importance:

- Reinforcing the economic framework and the liberal choice : reducing debt and ensuring macroeconomic balance as well as the setting up of several free trade zones (the EU, the US, Arab countries and Turkey).
- Launch of transport mega-infrastructure through the policy of large-scale projects (highways, ports and airports).
- Guaranteeing water and food security: the policy of dams, law 10-95 on water, the creation of the higher council for water and climate, desalination, launch of the green Morocco plan with its two pillars (the first focuses on modernisation and competitiveness while the second on social support), promoting agricultural research, etc...
- Implementation of sector-based voluntary policies : Industry Emergency plan I and II, Vision 2010 and 2020 concerning tourism, Rawaj Plan in trade, Digital Morocco plan for new information and communication technologies, Halieutis plan in the sector of fisheries, logistics 2020 strategy and Morocco's innovation strategy...
- Promoting human development: improving health services provided in the pre and neonatal periods, the adoption of mandatory health insurance (AMO), generalising access to schools (99% in 2009), educational reform, reform and empowerment of

universities, increasing access to drinking water in rural areas from 14% in 1992 to 92% in 2012 through the programme of grouped supply of potable water to rural population (PAGER), increasing rural electrification from 15% in 1992 to 97.4% in 2012 thanks to the Global Rural Electrification Program (PERG).

- Achieving social solidarity: the national programme for rural roads (PNRRI) (rate of services during the programme's first phase up from 36% in 1995 to 54% in 2005. In the second phase the rate jumped to 80% in 2015), the launch of the national initiative for human development (INDH) with 23,000 projects carried out between 2005 and 2011, the setting up of the medical assistance system (RAMED) benefiting the poor, the compensation fund which subsidies basic products represented 20% of the 2011 budget spending.
- Promoting environmental awareness and environment-friendly development: environmental upgrading through The national sewage programme (PNA) the national programme for managing household waste (PNDM). The institutionalisation of sustainable development (the National Charter for Environment and Sustainable Development, framework law, the national strategy for sustainable development and the creation of the Moroccan center for clean production (CMPP).

Overall, the achievements of the last 20 years are positive.

Indicator	1992	2012
Population	~ 22.5 million	~ 32 million
Natural population increase	2.2%	1.32%
Life expectancy	65	74.8
GDP	\$28.7 billion	\$96 billion (2011)
GDP per capita	\$1,150	\$3,200
Access to drinking water – rural communities (PAGER)	14%	92%
Electrification – rural communities (PERG)	15%	97.4%
Rate of road access	36%	80%
Protected areas	70,380 ha	750,000 ha
Reforestation/forest regeneration	20,000 ha	40,000 ha
Poverty rate	16.5%	8.8% (2008)
Extreme poverty rate	3%	0.6% (2008)
Net school enrolment rate	52.4%	93.6% (2010)
Illiteracy rate	58%	39% (2010)

Trends over the last 20 years in Morocco's move towards the construction of a social project based on sustainable development can be divided into three main phases, as shown below:

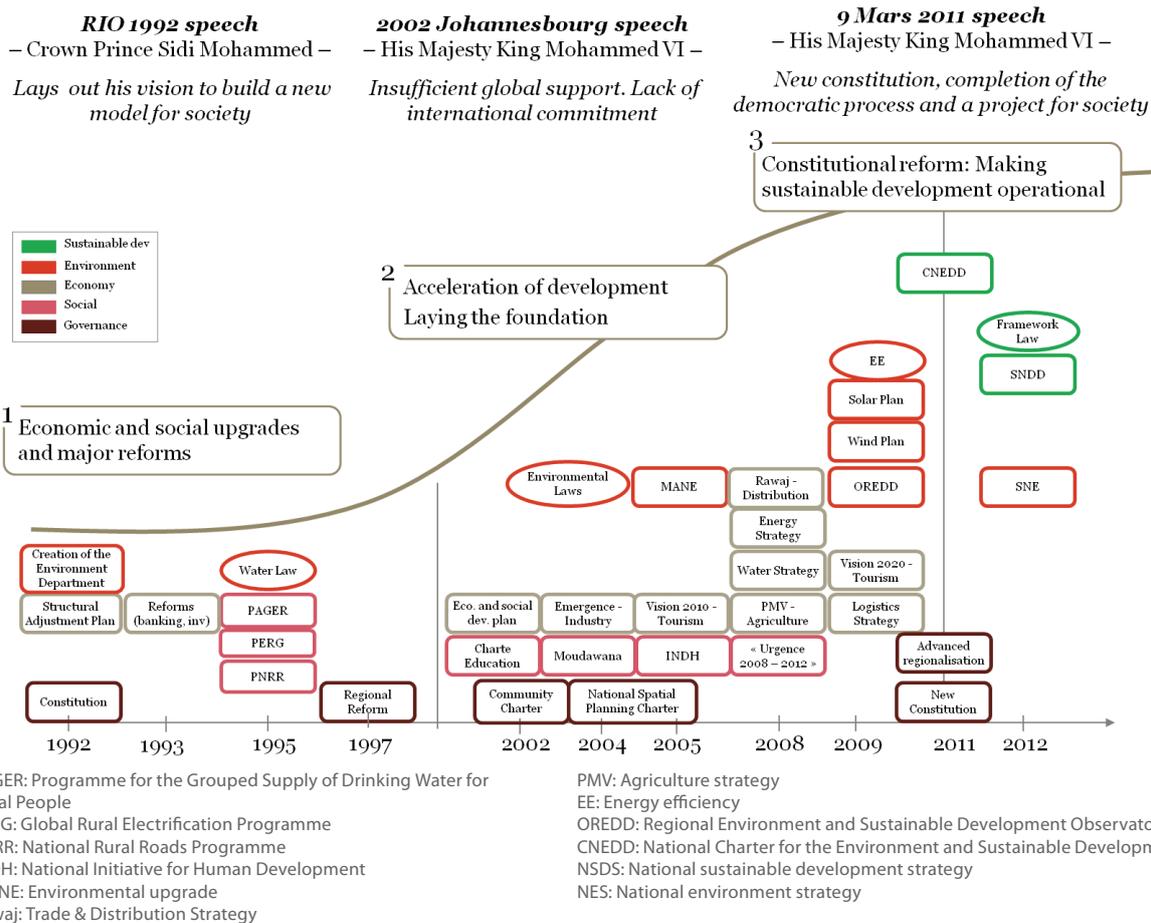


Figure 4 : Evolution and landmark events in Morocco

The analysis of the result of Morocco's action was based on four elements relating to governance, society, economy and environment. The different projects launched previously to face the economic, social, environmental and institutional challenges were gradually consolidated to form a social project spurred by **His Majesty King Mohammed VI** and endorsed by the Moroccan government, civil society, private sector and the people.

Generally speaking, the three stages show Morocco's progress in implementing sustainable development:

First stages : Upgrading social economy

Following its structural adjustment programme that was conducted jointly with the International Monetary Fund (1981-1994), Morocco launched a policy of liberalisation of its economy and reinforced some industrial sectors that are key to exports while focusing boosting the

services sector. In parallel, a big portion of public investments went to large-scale social projects aiming at opening up rural areas, such as the electrification programme of rural areas (PERG), the national roads programme (PNRR), and the potable water supply programme benefiting rural population (PAGER). This first stage was also characterised by considerable reforms in the finance and monetary sector.

Second Stage : implementing the basics and accelerating development

this stage saw the acceleration of institutional and legal reforms notably at the social level with the reform of the family code. The national initiative for human development has created a genuine social participatory momentum. At the economic level, the large-scale sector-based strategies offered visibility and have systematically integrated the social constituent, notably

in terms of creating job opportunities. Gradually, the sector-based strategies integrated the environmental aspect.

Third stage : democratic achievement and the implementation of sustainable development as a societal project

- February 8, 2011: the adoption of the operationalisation process of the national charter for the environment and sustainable development.
- March 9, 2011: His Majesty King Mohammed VI delivers speech to the nation about the new constitution, which was elaborated according to a participatory approach then adopted by majority in a popular referendum, thus ushering a new era in reinforcing the rule of law and the Moroccan societal project.

Morocco, who has less than 0.5% of the world population, less than 0.17% of energy consumption and whose CO2 emission does not exceed 2.5 tonnes per capita per year, is a country with an ecological concern enables it to be listed among the low emitters.

Morocco, while being aware of the need for technical and economic development that aims at achieving the sustainable well-being of citizens, laid the basis for a new development model that is geared towards sustainable

development.

This model, defined in the Brundtland report of 1987 as a “development that meets present needs without compromising the ability of future generations to meet their own needs,” was enriched by debates and contributions from around the globe and received an institutional status in 1992 during the Earth Summit in Rio De Janeiro, Brazil.

Given its scale, responsibilities and commitments, Morocco’s actions led to tangible and remarkable results.

Structured around universally recognized principles and enriched with international experience feedback, the new supreme law has become a reference that recognizes sustainable development as a right of every citizen. Today, Morocco is undertaking a project of harmonising the economic, political and legal structures laid down in the new constitution.

The prospects opened by each project are enormous. Public action led by a new cabinet is resolutely carried out according to a participatory and inclusive approach involving all stakeholders. This approach, despite difficulties relating to its conducts, contributes to the strengthening of the rule of law and solidarity, such values that have become primary principles for Morocco.

Good governance : from representation to participation

Sustainable development is first and foremost a matter of governance. It is significant that RIO+20 put this issue on the agenda. Indeed, 20 years after the first Earth Summit in Rio (1992), it is time to assess progress made in terms of the commitments as well as the constraints and difficulties encountered in implementing the 21 Agenda, conventions on biodiversity, the fight against climate change and desertification.

Implement a policy of sustainable development requires adequate governance whether at the international, regional or local levels.

Achieving sustainable development by adequate governance, both internationally, nationally, regionally and locally. In this respect, before taking stock of Morocco's achievements at the major levels of economy, society or the environment, we deem it important to analyze the evolution of governance in Morocco and identify the new challenges that we are called upon to address together in the upcoming decades.

1. The Kingdom's cultural frame of reference

We tend to forget the cultural constituent in the success of sustainable development. The principle 21 of the Rio declaration recommends "The creativity, ideals and courage of the youth of the world should be mobilized to forge a global partnership in order to achieve sustainable development and ensure a better future for all".

As a young country, Morocco boasts a rich history. With an over 12 centuries-old history of existence, Morocco's monarchy institution was enshrined in different ways in the constitutions of 1962, 1970, 1972, 1992, 1996 and 2011. True to its irreversible choice to build a state of democracy and the rule of law, the Kingdom of Morocco is resolutely pursuing the process of consolidating and reinforcing the institutions of a modern state founded on the principles of participation, pluralism and good governance.

The Kingdom's cultural and legal frame of reference is spelled out in the preamble of the constitution of 2011. It develops an inclusive society where everyone enjoys security, liberty, equal opportunity, dignity and social justice under the principle of correlation between rights and citizenship duties.

A sovereign Muslim state attached to its national unity and territorial integrity, the Kingdom of Morocco spares no effort to preserve its national identity which is diverse and indivisible. The unity of the national identity is forged by the convergence of Arab-Islamic, Amazigh and Saharan constituents which has been enriched by African, Andalusian, Hebraic and Mediterranean tributaries.

The importance given to the Islamic religion in this national frame of reference goes in line with the Moroccan people's attachment to the values of openness, moderation, tolerance and dialogue for a mutual understanding between all cultures and civilisations of the world.

Recognizing the need to strengthen its rightful role at the world stage, the Kingdom of Morocco, an active member of international organisations, is committed

to the principles, rights and obligations laid down in international charters and conventions. It reaffirms its attachment to human rights as they are universally recognized as well as the willingness to continue endeavouring to preserve world peace and security.

2. Evolution of national governance : the constitutional reform

The Kingdom of Morocco is fully engaged in its modernisation and in its political, economic, social and environmental policies: building democracy an citizens' rights, dynamism of the civil society, deep reform of the family code, large-scale development plans, etc...

Following a first stage of economic and social upgrading, a second phase of setting up the basics and accelerating development has led to carrying out considerable reforms notably in the social and economic fields. Democratic openness was also promoted. In this regard, the publishing of the Equity and Reconciliation (IER) report in 2006, which shed light on the human rights violations committed between 1956 and 1999, represented an important step towards anchoring democracy in our country.

These advances paved the way for other achievements. The regional context, notably the Arab Spring, led to increasing the pace of reforms. Morocco's political and democratic stability emerged stronger.

On March 9, 2011, His Majesty King Mohammed VI delivered a speech promising major constitutional reform that will give more powers to the legislative and the executive through the Parliament and the Moroccan government.

His Majesty King Mohammed VI gave a speech announcing a major constitutional reform which should lead to transfer a large part of the legislative and executive powers to the Parliament and the Moroccan government.

This reform changed the system to a form of parliamentary monarchy where the Prime Minister is

now appointed by the King as head of government from the party that won most seats in legislative elections. The King retains his role as a religious leader and head of state. He recognizes all Moroccan identities and opens the way to significant progress. The draft constitution was subject of a referendum of July 2011 and was adopted with an overwhelming majority exceeding 98% of votes.

Article 1 of the new constitution of 2011 stipulates that Morocco is a constitutional, democratic, parliamentary

and social monarchy. The constitutional regime of the kingdom is based on the separation, balance and collaboration of powers as well as on citizenship and participatory democracy in addition to the principles of good governance and the correlation between responsibility and accountability.

The new constitution refers to sustainable development as a right to every citizen. Public authorities should endeavour to mobilise all means to ensure the respect for this right.

The new constitution

The new constitution of 2011 is considered as a document that marked a democratic watershed in Morocco.

The main changes brought by the new supreme law :

- Coherence and modernity in the form (180 articles instead of 108 in the former document, and 14 titles). The preamble is part of the constitutional document.
- The constitution was drafted using a methodological, democratic, inclusive and transparent approach. It is designed by Moroccans for Moroccans.
- It includes the foundations of the Moroccan plural identity.
- It recognizes and enshrines linguistic diversity.
- It represents a genuine citizenship charter of rights and liberties as they are known in the universal frame of reference of human rights and promotes gender equality by enshrining parity.
- It gives primacy to national sovereignty and the supremacy of the constitution.
- The constitution establishes the separation of powers within the framework of a constitutional, democratic, parliamentary and social monarchy.
- Under the new supreme law, the judiciary is an independent power tasked with protecting rights and guaranteeing respect for the law.

The constitution enshrines

- Citizenship and participatory democracy.
- The protection of the environment and sustainable development as a right to every citizen.
- Territorial democracy (advanced regionalisation).
- The founding principles in terms of good governance, moralising public life and the economic law.
- The right to access information.

3. Evolution of governance at the regional level: territorial approach

The adoption of public policies founded on centralised planning showed its impotence in the operational implementation.

Therefore, the project of advanced regionalisation, led since January 2010 by the Advisory Committee on Regionalisation (CCR), aims at expanding the powers of regions through a committed and gradual conduct of the decentralisation and deconcentration process. Advanced regionalisation aims at achieving "integrated and sustainable development at the economic, social, cultural and environmental levels," through promoting the regions' potentials and resources. The project was institutional reinforced in Article 1 of the new constitution which identifies the territorial organisation

of the Kingdom as "decentralised and founded on advanced regionalisation."

The government and CCR deem this project will lead to economic and social development of the whole regions of the Kingdom. Affirmative action towards a larger participation of women in managing regional and local affairs will also be boosted by a constitutional provision enabling the legislator to promote equal access of women and men to elected offices.

The advanced regionalisation in Morocco provides for a new regional map composed of 12 regions instead of 16, that is a reduction of 25%. This new regional organisation was conducted on the basis of criteria including the

Land Management and Territorial Approach

For over two decades, Morocco has the deep thinking and integrated sustainable development of these areas, whether urban or rural. This was evidenced by several founders tools.

• Tools for reflection and decision at National and Regional levels:

- Charter of land planning : establishing the philosophy and guiding principles for land planning across the country;
- National plan of land planning and their regional declination.

•Territorial approach for development, structured around three principles:

- Effective participation;
- Convergence;
- Contracting.

• Tools for implementation at local level:

- Territorial projects;
- Communal development plans;
- Etc.

principles of efficiency, homogeneity, proportionality and balance in addition to accessibility and proximity.

The evolution of the territorial approach marked a major turning point with the opening, in a participatory process extended to all stakeholders (public, private, NGO) enabled the elaboration of a National Charter for Territory Planning. The Charter reflects the goals, basic principles and overall directions of the national territory planning.

The national charter for territorial and sustainable development offers a frame of reference allowing the harmonisation of different sector-based policies as well as the increasing of synergies.

Alongside the national charter for territorial planning, the SNAT (national territorial planning scheme), the SRAT (regional schemes for territorial planning) and different local development plans enabled the definition of the guidelines for the state of regions for the upcoming 25 years. These schemes will serve, inter alia, as a basis for devising economic and social development plans that will guarantee the convergence of goals, the enhancement of the national competitiveness and territory.

This approach, which has been adopted by the ministry of housing, urbanism and city policy, is relevant to ensure

convergence and coherence between strategies and sector-based programmes at the territorial level with a view to expand the goals of sustainable development.

Today Morocco has modern territorial approaches and efficient tools that allow for laying the groundwork for a national, regional or local implementation of sustainable development. Indeed, the recent institutional measures have contributed to reinforce the role of territorial authorities in the sustainable development process. Their key role in advanced regionalisation enables them to bring a vital contribution to sustainable development of territories through promoting the potentials and resources of each region and reinforcing participatory democracy as well as the setting up of structural projects.

In this direction, important projects and partnership initiatives were carried out, making of Morocco a pioneer of sustainable city, notably through the implementation of Agenda 21 with over twenty conducted experiences, the upgrading programmes at the local environmental level (sewage, managing solid waste, developing green spaces, etc), the project of urban ecological transportation, the launched process of systematic integration of environmental management in local strategic planning, etc...

The new city of Lakhayta is the first city based on energy efficiency and renewable energies. It is part of a vision of sustainable development of Moroccan cities.

The institutionalisation of regional observatories of the environment and sustainable development reinforces regional and local specificities via collecting and updating the indicators. They are also considered as relay points to ensure citizen's access to information.

4.Evolution of the role of the civil society

The growing role of civil society urged policymakers to make deeper commitments in favour of preserving the environment and promoting sustainable development, which is a national issue. The initiative led by the civil society stems from the willingness to contribute to strengthening the role of analysis, negotiation and suggestion with a view to improving policies and programmes. Thus, the civil society is determined not to remain on the sidelines of the great debates of the country. Its role is to raise awareness, educate and sensitise to a common cause: sustainable development.

Given its proximity to the population and its awareness about the needs and interests of citizens such various fields as economy, education, society, culture, infrastructure, religion, associations has become an essential component of the country's economic and social life. The synergies it developed together



with the government and the private sector through partnerships and agreements have cemented its role and contributed to its development. In this respect, the National Initiative for Human Development (INDH) is an example of a framework propitious for the development of such partnerships. To analyze this momentum, the high commission for planning (HCP) conducted a survey in 2007 showing that 2,000 associations, out of 44,000 involved in the study, operate in the field of environment.

This momentum has been widely encouraged by public authorities and supported by the new Constitution which recognizes civil society's role as a key player in a participatory democracy both at the national and local levels.

Currently, NGOs operating in the area of environment sit on many advisory bodies like the Economic and Social Council.

In the field of environment, effective collaboration has been developed with NGOs, especially through steady support for the strengthening of its role as a development partner, through developing capacity building programmes targeting civil society players, funding sustainable development projects, and promoting exchange of experiences and initiatives through, inter alia, networking. The survey also showed that this momentum must be sustained because many organizations suffer from a lack of technical and financial means.



مؤسسة محمد السادس لحماية البيئة
FONDATION MOHAMMED VI
POUR LA PROTECTION DE L'ENVIRONNEMENT
www.fm6e.org

The Mohammed VI Foundation for Environmental Protection

The Mohammed VI Foundation for Environmental Protection (FM6E) was established in June 2001 by His Majesty the King Mohammed VI, and presided by Her Royal Highness Princess Lalla Hasnaa.

Its main mission is to raise awareness and educate citizens, especially among youth, in preserving their environment.

Among its programs all oriented toward the main mission, appear the program «Young reporters for the environment.» From its launch in 2002, the program mobilized more than 17000 students from the age of 12 to 18 years old who conducted journalistic investigations on topics related to their immediate environment (waste, water, energy, agriculture, cities, coasts, biodiversity etc...)

On the occasion of the 10th edition of this program and in contribution to the preparatory work for the Rio+20 Conference, a forum of over 200 young students, was organized the 28th of April 2012 on «Education and awareness raising for responsible consumption.» The many important recommendations issued from the forum are summarized and given in appendix.

This momentum culminated with the institutional recognition of associations and their impact. Article 12 of the new constitution allows associations interested in public affairs and non-governmental organisations to contribute within the framework of participatory democracy to the elaboration, implementation and the assessment of decisions and projects of elected institutions and public authorities.

Community-Based Adaptation Programme: A Moroccan Association receives the Equator Prize 2012

The AMSING is a community organisation led by the youth. It the Equator Prize in 2012 for its Community-based Adaptation Programme which aims at strengthening the resilience of the local ecosystem and adaptability of the community members, whose livelihoods depend mainly natural resources. The project is a pioneering experience in testing a combination of adaptation solutions, including biological and mechanical corrections of ravines to protect the local ecosystem and necessary infrastructure, resilient farming techniques to foster local food security; testing of a community system early alert and climate risk management.

Economic operators formed the General Confederation of Moroccan Enterprises (CGEM) to meet the present challenges of sustainable development. The creation of the corporate social responsibility (LABEL RSE) in 2006 is in line with the international standard ISO 26000. Moreover, thanks to its very concept and significant efforts deployed

in agreements by many players (Banks, public authorities), this label has helped strengthen the private sector's action. The first conference on corporate social responsibility was held in 2011 was a good and pertinent example for increasing exchanges and awareness about these issues.

The CGEM's Corporate social responsibility label (LABEL RSE)

The CGEM Label for social responsibility (RSE) is a solemn recognition of the respect of Moroccan companies of their commitment to uphold, defend and promote the universal principles of social responsibility and sustainable development in their economic activities, their and social relations and more generally, in their contribution to value creation.

Through this initiative, the CGEM endeavours to promote productive investment attractiveness and long-term growth that lies, henceforth, in human development, respect for fundamental rights of the individual and the rule of law, quality of employment conditions, regulation of professional relations, protection of the environment, transparency and effectiveness of competition rules.

The frame of reference of CGEM Label is the charter of social responsibility of the CGEM, adopted on December 14, 2006 by the national enterprise council.

This charter is defined in accordance with the fundamental principles of the constitution of the Kingdom and the stipulations of international conventions relating to fundamental human rights, the protection of the environment, good governance, fair competition.

It structured around nine areas of commitment:

1. respect for human rights;
2. continuously improve employment and labour conditions and professional relations;
3. Protect the environment;
4. Prevent corruption;
5. respect the rules of fair competition;
6. ncrease transparency of corporate governance;
7. Respect the interests of clients and consumers ;
8. Promote the social responsibility of suppliers and sub-contractors;
9. Develop social engagement.



5. Global governance of sustainable development: implementation

Implementation of Morocco's international commitments

By endorsing most international agreements on the environment, Morocco showed the international community strong commitment to meet the challenges of environment protection and sustainable development.

This commitment has embodied in the ratification of over 80 multilateral environment agreements and also in an active participation in different international forums that seek to find solutions to environmental issues.

Morocco was among the first countries to sign and ratify the three agreements that were made in the Rio Summit. It also established a legal and institutional framework in

order to honor all its commitments under three Conventions.

As part of its implementation of the UN Framework Convention on Climate Change, our country has set up the necessary structures to deal with the cross-section aspects of Climate Change through the creation of a national committee on climate change and a national council for a clean development mechanism (CDM). Morocco has also submitted two national communications and elaborated a national climate plan, presented during the Copenhagen Conference, which is being carried out at the local level through territorial climate plans. All these efforts will be capitalized in the process that has been launched for the elaboration of the national climate strategy.

On the other hand, Morocco supports the multilateral negotiation process of a new regime on climate change in line with the Kyoto Protocol. At the international level, Morocco advocates collective and individual action that takes into account the shared and different responsibilities and capacities. Morocco generally has a low level of greenhouse gas emissions (2.5 tonnes of CO₂ per capita per year) and a strong vulnerability to climate change. Morocco is also considered to be among the most active countries in the region in CDMs. A portfolio of forty projects and programmes has been developed of which 8 projects are registered at the CDM Executive Board with a potential reduction of greenhouse gas emissions estimated at 5.4 million TECO₂ per year.

Regarding biodiversity protection, a national biodiversity committee was established, and a national strategy and an action plan were developed. Morocco also submitted 4 national reports on the implementation of CDM and has already engaged in the process of ratifying the Nagoya Protocol. A national committee tasked with setting up a national legislation relating to access to genetic resources and to share the advantages resulting in their use (APA) was also created. In terms of conservation of biodiversity, a law on the protected areas was promulgated and a master plan for protected areas was elaborated. This has delineated over 150 biological and ecological sites with a surface area of 2.5 million ha that are subject to management rehabilitation plans, according to priorities. In the field of information and awareness raising, a center for information exchange (CHM) on biodiversity was also established.

Concerning the fight against desertification, Morocco has institutionalised the process of implementing this Convention through the creation of a coordination and monitoring service of the Convention on the Fight against Desertification. The Kingdom also developed a

national action plan to Combat Desertification (PANLCD) which is considered as a strategic and operational framework that reflects the measures taken by our country in the fight against desertification.

On the legislative and regulatory levels, measures have been taken to ensure the preservation and sustainable management of forest resources notably the decree establishing the compensation for deferred grazing in reforestation areas, and Law No. 1-06, on the sustainable development of palm plantations and on the protection of date palms. In terms of concrete actions, several major programmes have been undertaken to reverse the process of land degradation, reduce the scale of desertification and mitigate its impact.

Given the importance of safeguarding and developing of oases of the Argan trees, a National Agency for the development of oasis zones was established. This agency's is tasked with protecting and developing oases areas and the Argan tree in line with the sustainable development principle.

Morocco's international commitments have also led it to develop partnerships and strengthen its regional and international presence. Its time-honored economic solidarity and social policy is geared towards the Maghreb, the Arab World and Africa with whose people Morocco shares geographical, historical and human characteristics. The Euro-Mediterranean and the Atlantic partnership are fundamental assets. It also develops a South-South cooperation policy with Africa, Asia and Latin America.

For instance, in the field of climate, Morocco has joined the Arab Regional Initiative on climate change and to the Africa-EU initiative on climate change.

Maintain these partnerships for the benefit of national interests and sustainable development is an ongoing task that can not be reduced solely to the diplomatic action. This requires compromising interests and forces. The achievements of Morocco in terms of outreach, action and influence at the international stage has launched a new momentum.

Morocco has also hosted several international events including the Conferences of Parties of the UN Framework Convention on Climate Change (November 2001) and the Conference of the parties to the Convention on the Protection of Marine Environment and the Coastal Region and its Protocols, the Barcelona Convention (November 2009).

Economic Pillar : from reforms to sector-based strategies

Aware of global issues on the one hand and of its financial and geophysical constraints on the other hand, Morocco has secured the foundations of a successful economy less exposed to climatic hazards at a first stage, before beginning its transition to a green economy. The following section offers an overview of the economic development experienced by Morocco since Rio in 1992.

Morocco embarked on development in a difficult context:

- Climate: Arid and semi arid areas increased since 1960; The impact was also felt on water resources. Water availability from 2560 m³ per capita per year to 730 m³ per capita per year.

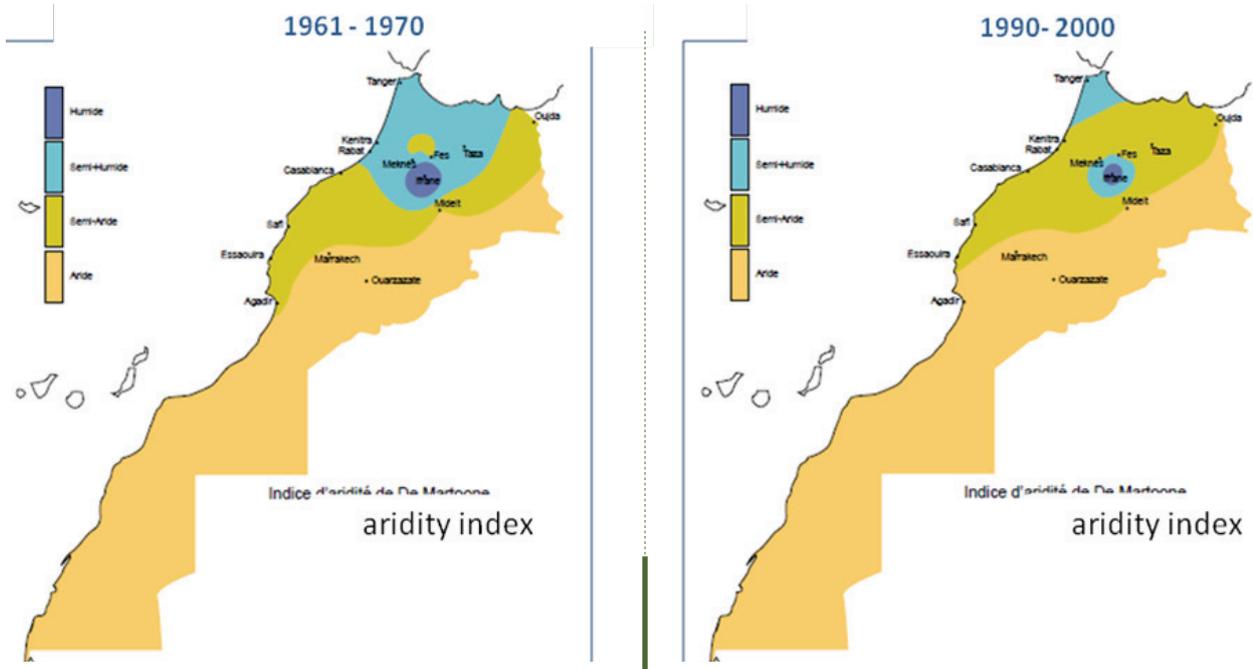


Figure 5 : Aridity index showing Morocco's climatic evolution - 1960 - 2000

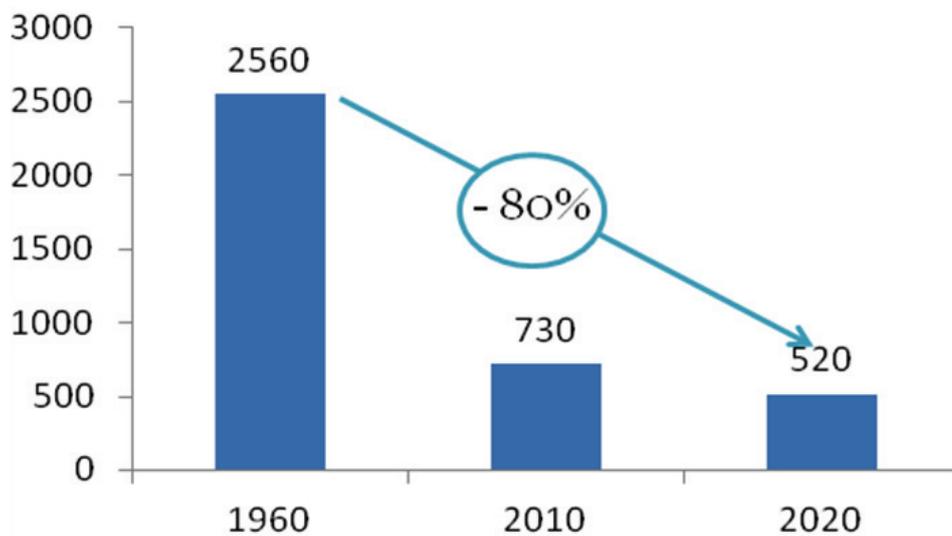


Figure 6 : Evolution of water availability (m³/capita/year)

- Energy: with a dependence rate of 97% accounting for 11% of GDP.
- Budget: the increasing trend of prices of basic products (Oil, hard wheat and sugar)

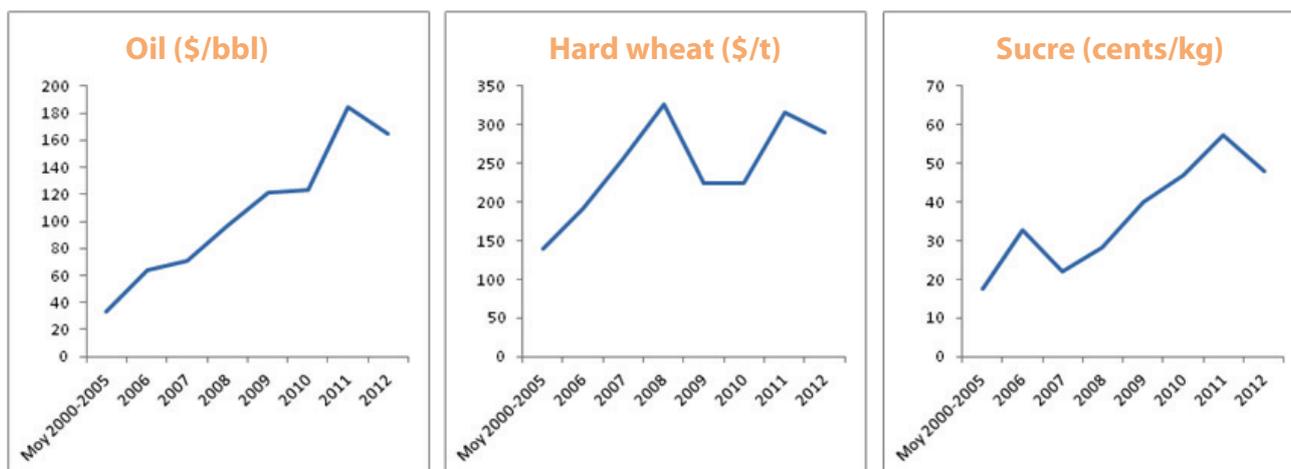


Figure 7 : Evolution of commodity prices 2000 - 2010

had a significant impact on affected the state's budget through the compensation fund- a social instrument that Subsidies commodity products so as to maintain the citizen's purchasing power, notably poor categories.

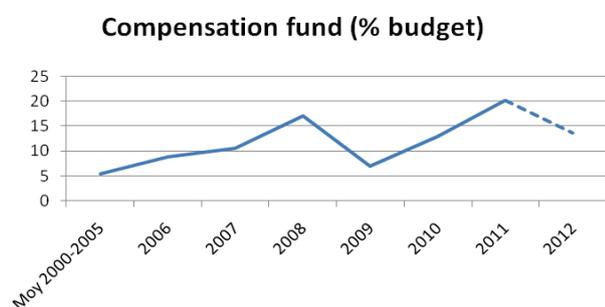


Figure 8 : Percentage of compensation fund in the budget

Despite these challenges Morocco experienced two remarkable decencies of economic development. The first was marked by large-scale structural reforms that enabled laying the foundation for sustainable development, while the second was characterised by the systematisation of sector-based approaches and the gradual incorporation of the environmental component.

1. Reinforcing the economic framework

Noting that sustainable development goes necessarily through a stable economic performance, we chose to shed light on the results of Morocco's action in this regard, because we believe that reforms in the economic

and financial sector could lead to greater social equity and better resource management.

Over the past two decades the momentum of economic activity, has resulted in structural changes and contributions to GDP growth differentiated by sector. The sector-based analysis of economic growth shows an increase in the sector of services in the national productive fabric, a significant contribution of the sectors with high added value and a higher share of new generation services gaining ground on traditional sectors.

Reforms, modernisation and liberalisation may be the three words that summarise the economic policy of the past 20 years.

Indeed, since the era of structural adjustment, especially after 1995, Morocco has undertaken a series of structural reforms in order to achieve strong and sustainable growth by an efficient reallocation of resources. These reforms, which included the liberalisation of the financial sector the restructuring of public finances with the objective of maintaining the fundamental balance of the economy at sustainable levels, also concerned the implementation of a set of measures to improve the offer such as the improvement of the businesses and the return on investment.

Afterwards the financial sector reforms (Loi Bancaire 1993, the transformation of the stock exchange into a private company in 1993) and monetary reforms (removing the supervision of credit and interest rate liberalisation) in the 1990s have enabled the private sector to support the financing of economic activity, allowing the state to establish the fundamental balance. The control of debt and inflation has been eased by these reforms.

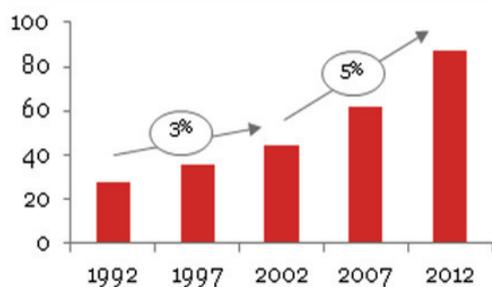


Figure 8: Changes in GDP (Billion \$)

As for inflation, its level decreased from an average 3.8% in the 1990 decade to 1.7% in 2002. Since then it has never surpassed 3%.

These reforms, along with the gradual liberalization of all activity sectors through the privatization policy, and the gradual opening towards the international market posted positive on the economy with an average growth rate of 3% in the 1992 decade and an average 5% for the 2002-2012 period.

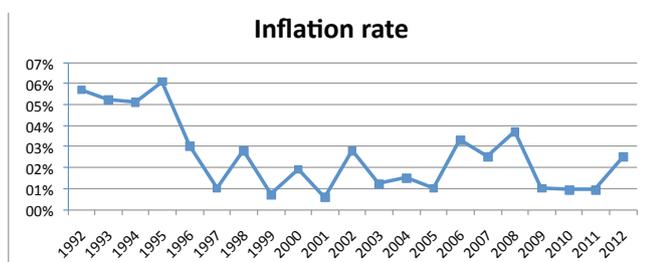


Figure 9: Inflation rate

The last decade saw a considerable acceleration in the opening and liberalization of the economy. The investment charter of 1995 several free trade agreements (EU / U.S. / Turkey / Arab Countries) marked the beginning of the decade. Coupled with sector-based strategies, they give visibility to investors and structure of industries and whole sectors of the Moroccan economy.

The volume of foreign direct investment (FDI) posted

a ten-fold increase between 1996 and 2011 making of Morocco the first African destination for FDI in 2012. this adds to the evolution of the institutional framework with a region-based approach and one-stop shop. Regional investment centers were also created with the aim to facilitate the creation of new businesses. In the same vein,

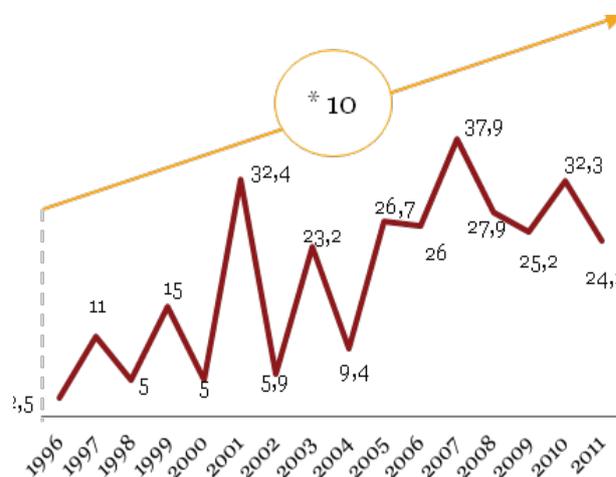


Figure 11: Changes in FDI (Billion \$)

the investment promotion agency (AMD) has significantly contributed to enhancing Morocco's attractiveness.

To tackle the good orientation of offer elements, the various components of domestic demand have marked a continued momentum between 2000 and 2010. The final consumption expenditure remained broadly the main engine of economic growth. With an average share in GDP of about 60%, the final household consumption improved following the enhancement of the purchasing power after the momentum of the labour market, salary hikes, income tax reduction, inflation control and the decreasing impact of drought on household income.

Investment has also played an increasing role throughout this period. The Gross Fixed Capital Formation which is, after the final consumption of households, the second important component of demand, showed unprecedented dynamism. Its progress pace has increased remarkably in recent years. This momentum is not only the result of efforts to reform and modernize the financial sector, but also the consolidation of public investments in such strategic sectors as telecommunications, rail, air and road transportation, port's activities, the education and housing

This decade was also marked by **the systematisation of sector-based approaches**. Indeed, every key sector in the Moroccan economy has adopted a strategy which sets targets and specifies them in action plans and programme contracts to integrate the private sector. These strategies can be classified into two types. First generation strategies, such as the industrial strategy (Emergence in 2004 and Emergence II in 2009) in addition to the first tourism promotion strategy (Vision 2010 launched in 2001) which developed a territorial approach mainly based on socio-economic criteria. The second generation strategies are gradually incorporating environmental components, such as the agricultural strategy, the logistics contract program, the latest tourism strategy, the Rawaj plan and Digital Morocco strategy as well as the new energy strategy (NSE: 2009).

This approach tends to be generalised notably since the process of the elaboration of the national environment and sustainable development charter which laid the basis for a broader consultation on environmental issues relating to socioeconomic development.

Finally, it is now clear with the new constitution, which enshrines sustainable development and the protection of the environment, that efforts in this area will be systematised. This raises new challenges:

How to qualify future public policies and what new analytical framework to use?

The national sustainable development strategy will partly help address this issue.

The following section highlights the approach adopted by Morocco to incorporate the environment aspect in the implementation of sector-based strategies.

2. Green and inclusive methods applied to a brown economy

The global economy is marked by a scarcity of resources that increases production costs. The rise in commodity prices is related to their exacerbating scarcity and the growing costs of their extraction. The deposits of cheap and good quality of some key resources such as oil, copper and gold, are already being depleted, resulting in a higher volume of fuel and fresh water for their extraction. This scarcity sounds the alarm regarding to conserve resources.

The UNEP released a report, entitled "Humanity Can and Must Do More with Less", in which it explained that the resource production rate exceeds that of economic growth and the fundamental principle of proportion. «That goal, however, demands an urgent rethink of the

links between resource use and economic prosperity, buttressed by a massive investment in technological, financial and social innovation, to at least freeze per capita consumption in wealthy countries and help developing nations follow a more sustainable path,» says the report.

Implementing sector-based cross-section strategies since the 2000s has gradually led to the inclusion of the environmental components at two levels:

- Preventing pollution
- Proportioning sector-based performances with an emphasis on resources.

Among the cross-section strategies, it is worth to mention those which aim at improving energy and water efficiency

- **The national priority action** plan includes a program of widespread use of low consumption lamps, LBC with the objective to install 22.7 million lamps in 2012 and progressively banning incandescence lamps.
- **The national energy efficiency programme** targets a saving of 15% of energy by 2020 through improving energy efficiency in several sectors.
- **The Water strategy** was adopted to meet the challenge of the scarcity of this vital resource and to be adapted to the effects of global warming causing the irregularity of rainfalls or long drought periods interspersed with heavy rain causing devastating floods. This strategy eyes the rationalisation of water use in all sectors especially in agriculture, which receives over 80% of available water and that could save 50% of it.

The National water irrigation saving in Morocco provides for an irrigation with modern methods such as drip-irrigation, construction of retention ponds combining the functions of irrigation and turbines for power generation. Similarly, wastewater recycling and reuse in multiple uses such as watering, are all steps taken to rationalise the use of this vital resource.

Other strategies for rational use of resources have been developed at the sector level.

- **The green Morocco plan 2020** in the field of agriculture which has been implemented since April 2008, has reinvigorated the agricultural policy, now considered among the main engines for the growth of the national economy in the next decade. The aim being to bring investments to the sector worth 150 billion dirhams by 2020 with the goal of generating 100 billion dirhams in the GDP annually.

The key ideas of these strategies are improving revenue through modernisation, aggregation and a regionalised

approach of sector development.

The rational use of water resources in agriculture can also contribute to greening this economic activity. Thus, although prospects for the sector's growth are important, the goals for reducing consumption are equally essential through the modification of production processes that can be implemented at lower cost.

- Providing incentives and subsidies to farmers to promote use of gravity irrigation in localised irrigation with a view of reaching 692,000 ha in 2020 instead of 154,000 currently,
- Raising awareness about "early planting dates,"
- Introducing water erosion control techniques,
- Mobilising water non-traditional water resources (reuse of wastewater),
- Captating superficial water through hydro agricultural planning (hillside dams, sawage irrigation...

The fisheries sector has also been targeted by a new development strategy, dubbed «Halieutis». this strategy sets the goal of achieving a GDP of 21.9 billion dirhams by 2020, a local consumption of 16 kg per capita per year, direct jobs to the ground for 115,000 people, an exports turnover of 3.1 billion dollars in addition to the guarantee of a sustainable management of 95% of exploited species.

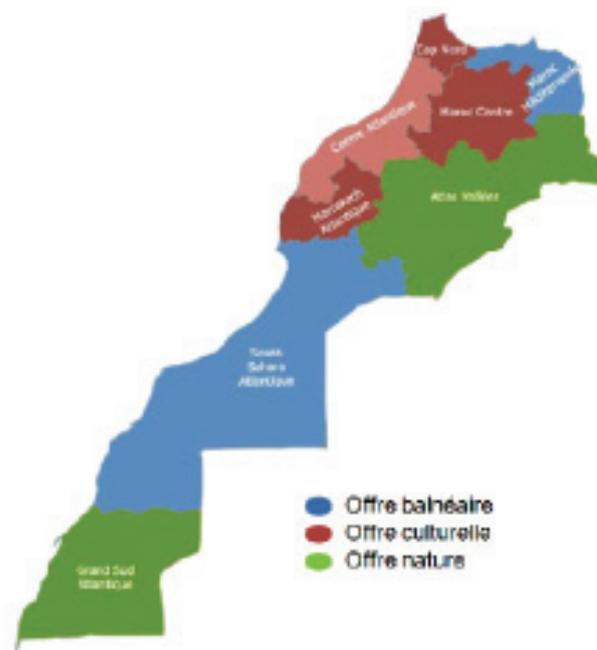
This new strategy is based on three major areas :

- Sustainable use of resources and the promotion of responsible fishing;
- Developing efficient fishing by improving the treatment chain of the product;
- Reinforcing competitiveness with a view to acquire new markets (north America and the Middle East for instance);
- **The tourism sector** posted considerable achievements during the last decade placing Morocco as the worlds 25th best tourism performance with the sector being the second largest contributor to GDP by 7.7% and the second provider of job opportunities (640,000 jobs). The sector has now a new development strategy for 2020 that puts sustainability on top of its concerns.
- Indeed, beyond the quantitative growth goals it has set (increase the sector's size two-fold, tourist arrivals

and market share in key traditional European markets and building nearly 200,000 new hotel beds), the Vision 2020 is primarily a qualitative ambition to promote an authentic tourism, clean and responsible, which bolsters economic development without altering its natural and cultural heritage.

The blue: coastal offer, the green natural offer, brown: cultural offer

- The analysis of the density levels of each of the tourist destinations of the Vision 2020 enabled the establishment of a level of tourist density that should not be exceeded to avoid the degradation of ecosystems and the negative impact on local communities. These levels of tourist density in turn structured growth



targets for each of the tourist destinations of Morocco, thus incorporating sustainability at the heart of the elaboration of the strategy

- Beyond strategic planning, the aim is to integrate sustainability into all the implementation levels of the strategy and lifecycle of tourism products.
- In terms of control and strategic planning, Vision 2020 targeted the setting up of a monitoring and sustainability system structured around a set of indicators that take into account compliance with the thresholds of tourist density, the impact of tourism development at the regional environment level, the socio-economic impact and tourist perception of sustainability throughout their travel experience.

- Similarly, to ensure integration of sustainability very early in the design of tourism projects, both in terms of building and management, a set of measures combining regulations and mandatory standards and financial support mechanisms benefiting tourist operators and

players were scheduled.

- This approach will not fail to reinvigorate a marked related to green economy, given that demand on clean technologies, specific equipment, specialized human resources, etc.

The handicrafts sector- inclusivity and resource protection

Reconstruction of a traditional tannery in Khénifra

The projects of upgrading traditional tanneries offers an excellent example because they combine the concern to safeguard the cultural and historical heritage with maintaining a source of job opportunities while preserving water resources and reducing pollution.



Figure 8 Upgrading traditional tannery

Sustainable transport and logistics

Pollution prevention

Curbing greenhouse gas emissions

- Renewing the road freight fleet whose age exceeds 10 years to reduce emissions of noxious gas;

Upgrading the road technical control system with a strict check on noxious gas emissions and a better engine performance

Environmental assessment

- Integrating the environment component in infrastructure projects (studies of the impact on the environment)
- Detailed environmental assessment concerning the project whose impact is considerable or those carried out in hard-to-protect regions;

Development of an environment-friendly transport model

- Launching development programmes of rail transport (TGV, doubling railway lines, increasing capacity,

building new lines).

- Proposal for the generalisation of the option «tramway», adopted in Rabat and Salé since 2010, in all other major cities with a population exceeding 500,000 inhabitants.



Proportioning

Energy efficiency

- Integration of the principles of energy efficiency in training programmes for professional drivers of passengers and freight vehicles;
- Sound management of the flows of goods at the domestic by optimizing the intervention of road and rail transport depending on the nature of the goods in order to minimise the consumption of petroleum products;
- Improving energy efficiency in the sector of basic infrastructure and transport (road, rail and air);

The strategy to develop the logistics competitiveness, which accompanies the other sector-based strategies (Emergence, Green Morocco, Halieutis, etc..), aims to promote the optimal management goods flow, increase GDP growth from 3 to 5 points by 2015 and generate 36,000 jobs by 2015 and 96,000 jobs by 2030. The implementation of this strategy will lead to lowering CO2 emissions by 35% in 2015, as well as to relieving congestion in cities roads.

Up to now, public investment mobilised for the implementation of this strategy stands at about 2.4 billion dirhams. It lies in the building of a road link

between the Port of Casablanca and the logistics zone of Zenata notably the acquisition of land in this area and the setting up of a logistics platforms in Zenata and Mita.

Conclusions

The Moroccan economy has been unsteady posting GDP fluctuations that can mainly be ascribed to the vulnerability of economic growth to climatic hazards, particularly because of the strategic role played by agriculture in the country's economy. However, since 2000, the impact of drought on non-agricultural economic activity tends to be mitigated thanks to significant investments in the water sector which increased mobilisation and secured supply from basin transfers.

Moreover, reforms, voluntary sector-based policies, culminated gradually in a more industrialised economy and a growth of the sector of services. The contribution of services sector in 2011 reached almost 50% of GDP resulting in a mechanically de-correlation of the overall performance with agricultural performance. Thus, the GDP growth rate, excluding agriculture, never exceeded 3% in recent years, even during drought years

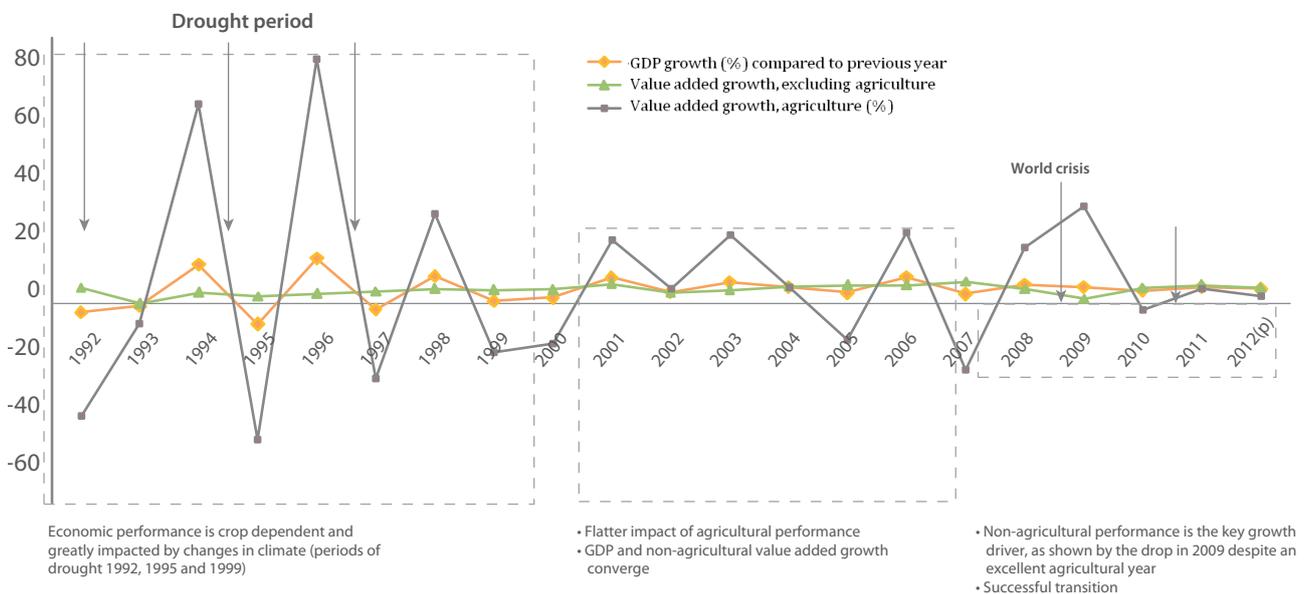


Figure 13: Change in growth rates (GDP, agricultural UA and non-agricultural UA)

Social pillar: gradual transition

During the last two decades, health, education and the fight against poverty were a priority at the level of social action. The share of the accumulated public spending in the budget (over 30% of the state budget) reflects the amount of devoted efforts. Nevertheless, the State's action alone is not sufficient. A turning point was marked in 2005 with the launch of the INDH programme which strongly involves the civil society in the undertaken effort. With this programme, beyond the statistical report, a momentum was sparked which, for 5 years, was a strengthened professionalized and opened new development prospects.

A «Morocco with two speeds.» For a long time the weak point of development in Morocco was the stark contrast between the growing prosperity of urban centers and the precariousness of his unchanging rural areas.

Indicators	1995	2012
Served by rural road	36%	80%
Access to potable water in rural areas	14%	92%
Access to electricity in rural areas	15%	97,4%
School enrolment rate	52%	90,5%

The last decade, as was reflected at the economic level, saw the launch of major sector-based projects which have become substantially more inclusive gearing efforts as much as possible to the rural world. In this regard, rural areas were gradually incorporated in the urban momentum. The structurally more developed urban centers have been evolving in line with a sector-based approach towards integrated development. The creation of a center in charge of "city policy" is but an example.

At the same time, the challenges and shortcomings, for a developing countries like Morocco, remain enormous. Expectations are high, as evidenced by the popular expression that accompanied the Arab Spring. Morocco, which had begun long before its action has managed to absorb and turn those expectations and to include this momentum in the achievement of a new social project

The new Moroccan Constitution (2011) enshrines the fundamental right to a decent life for all citizens, thus creating new challenges for public authorities. It also breaks new grounds by opening up new action areas for economic players, citizens, experts, etc.... An action that offers a ground more common than ever.

Among the direct consequences of this situation was the growing phenomenon of rural exodus to urban centers resulting in:

- On the one hand, pressure on the structures of cities that could not keep developing: slums, unemployment (unqualified), etc..
- On the other hand, a lack of interest for rural areas which were gradually emptied of their active resources, with a decreasing settlement of their population.

The Moroccan government decided to reverse this trend by taking an historic watershed in the history of development. In two decades, various actions allowed in fact for remedying this situation by acting on the following areas.

1. Development of the health sector

Today, Morocco is witnessing several socio-cultural changes and economic changes that have contributed to changing the dynamics of its population.

Being in an advanced demographic transition with a natural growth rate of 1.32% in 2010 against 2.7% in the 60's because of falling birth-rate, Morocco can easily control its sustainable development.

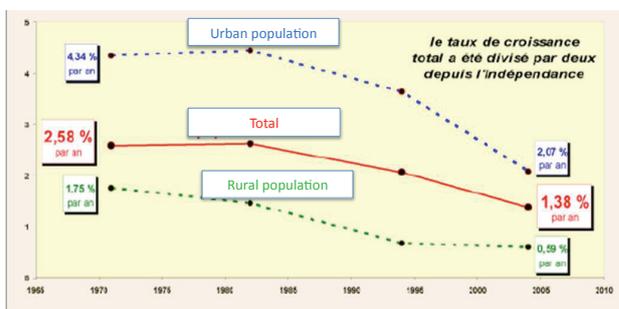


Figure 13 : GDP growth rate (agricultural and non-agricultural added value)

At the same time, Morocco has a strong decline in fertility with 2.20 births in 2010, which is mainly due to women's access to education and employment, and the effectiveness of the NGOs' actions in the field of family planning and the efforts by the Health Ministry the national family planning programme (ENPSF). These efforts resulted in rising contraceptive prevalence rate to 67.4%, of which modern methods accounted for 56.7% according on the results of a national survey conducted in 2011 on population and family health.

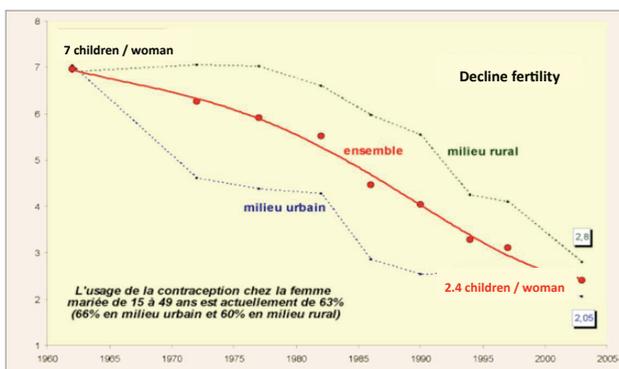


Figure 10 : Evolution of the number of children per woman

The rates of maternal and infant mortality have also fallen considerably in recent years in line with MDGs.

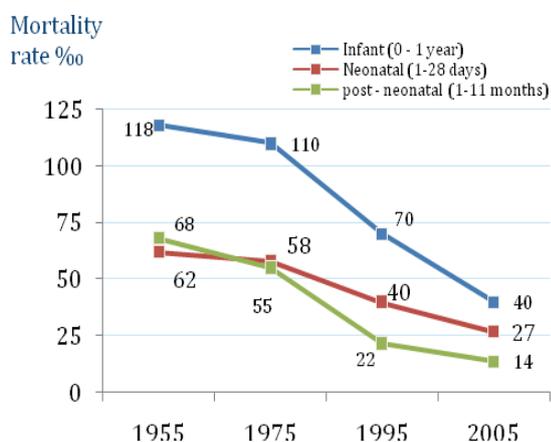


Figure 16 : Evolution of infant mortality

According to a survey presented by the High Planning Commission, the infant mortality rate fell from 149 per thousand in 1962 to 75.7 per thousand in 1987 to 30 per thousand in 2010. Maternal mortality is also following a falling trend. Per 100,000 births, deaths for maternity reasons decreased from 227 deaths (186 in urban and 267 rural areas) over 1994-2003, to 112 deaths in 2010 (73 in urban and 148 in rural areas).

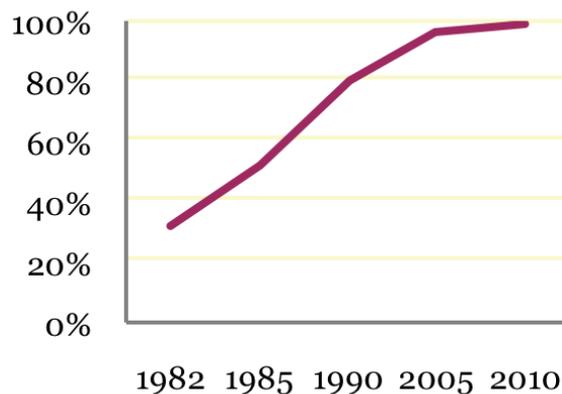


Figure 11 Evolution of the vaccination rate for babies < 1 year

Immunization coverage had a significant diseases such as polio and diphtheria. The National Immunization Program, which began in 1981, has eliminated neonatal tetanus and reduced measles and whooping cough. Immunization rates by type of target diseases of vaccination in 2011: BCG (98.5%), DTP1 (97.6%), DTP2 (96.6%), DTP3 (95.2%), Pol 1 (97, 3%), Pol2 (96.2%), pol3 (94.6%) and Measles (89.3%). 87.7% of babies were fully vaccinated in 2011 (93.5% urban and 82.6% in rural areas).

The national strategic plan to fight HIV / AIDS has contributed to keeping HIV prevalence at low levels in the general population (0.1%). Under this plan, all stakeholders in the fight against HIV / AIDS (government ministerial departments of health, education, justice), national NGOs, the media endeavour to ensure universal access to prevention services, treatment, care and support and also to fight against all forms of discrimination, stigmatization and non respect of human rights that limits the access of vulnerable groups and people living with HIV to prevention, treatment and care services.

Given the improvement in health conditions and living standards, life expectancy today stands at 74.8 years compared to 47 years in 1962.

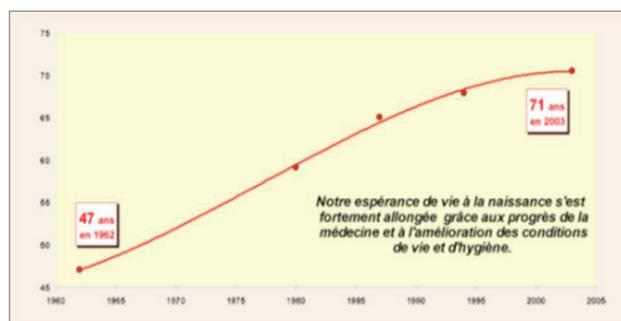


Figure 12 : life expectancy

Societal changes and new behaviours as well as the choices and constraints they generated had a considerable influence on demographic issues (fertility,

mortality and migration) and the structures of the Moroccan population.

Generalisation of medical coverage

Medicine in Morocco is organized into a public health service which ensures access to healthcare to all citizens and redress inequalities through different mechanisms, such as, health insurance, free healthcare system or reducing cost to the needy or even the direct funding of healthcare in the form of subsidies to private care providers or NGO whose mission is to help the economically disadvantaged.

The healthcare system in Morocco is based on three elements :

- Compulsory health insurance (AMO) laid down in law n° 65-00 on the code of basic medical coverage promulgated by decree (dahir) n° 1-02-296 of 25 rejab 1423 (October 3, 2002) which covers all the staff of the private and public sector as well as their families;
- The health assistance system (RAMED), established by law n° 65-00, benefits the poor and citizens with low income;
- The medical coverage system benefiting the rest of the population.

The AMO, entered into force on August 18, 2005, and began yielding results since the beginning of March 2007. It benefits about a third of the Moroccan population.

The RAMED provides free public health care to eligible people who do not have sufficient financial resources. Based on the principles of national solidarity and social assistance to those who do not have access to compulsory health insurance (AMO), the RAMED embodies the right to health and preserves the dignity guaranteed by international conventions and the constitution.

Nearly three billion dirhams were invested in these projects.

People in poverty will benefit from free medical assistance programme, while those in vulnerable situation will have to pay 120 dirhams per person, maximum 600 dirhams per household. 28% of the Kingdom's population is eligible to services offered by this system, including 4 million people in absolute poverty (fully free), 4.5 million in precarious situation (partly free) and nearly 160,000 legal beneficiary of social protection centers, prisons and state-sponsored individuals.

2. Education : Challenges of generalisation and quality

In a speech on March 13, 2003, King Mohammed VI recalled that illiteracy and the non-schooling of the youth are real handicaps that deeply undermine economic and social development. His Majesty added that literacy will enable Morocco to access the world of knowledge and communication. The Monarch highlighted literacy's importance as a "a social obligation of the State». The effort focused simultaneously on formal education (school education) and non-formal education (care for out of school children and adult literacy).

We provide a summary review of the education sector on three areas:

- Generalising schooling
- Scientific research
- Vocational training and professional integration

Generalising schooling

The education indicators posted a significant improvement since independence. The number of pupils enrolled in schools (primary and secondary) grew from 366,000 in 1955-1956 to over 5.8 million in 2003-2004, that is a 16-fold increase when the global population has tripled.

- The net schooling rate in the first cycle of fundamental education increased 39 points in 30 years (1970-2000). This progress is the most important to be registered in the past years following the implementation of the education and training charter , since the net school enrolment rate of children between 6 and 11 years grew from 68.6% in 1997-1998 to 92.2% in 2003-2004. Such considerable achievements were also noted in rural areas concerning the schooling of girls.

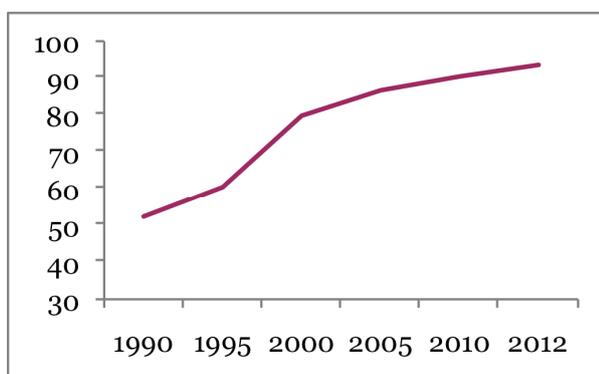


Figure 13 : Evolution the schooling rate

- The net enrolment rate of children aged between 6-11 years, at the national level in 2009/2010, stood at about

97.5% against 52.4% in 1990/91. This rate increased from 35.9% to 95.4% in rural areas. Over the same period, the improvement was greater for girls in rural areas, where the rate almost quadrupled from 22.5% to 93.6%.

- In terms of secondary education (junior high school), the specific enrolment rate for children aged between 12-14 years reached 79.1% overall and 73.5% for girls in 2010-2011. At the secondary level (senior high school) the specific enrolment rate for students aged between, 15 to 17 years stood at 52.8% in 2010-2011 and 48.2% for girls.
- The index of gender parity in 2008/2009 reached 89% in primary schools, 80% in junior high schools, 97% in senior high schools and 90% in higher education. Compared to the academic year 1990/91, these figures are 31 points higher senior high schools and 34 points in higher education while they are only 21 points higher in primary and 11 points higher in junior high school.
- Concerning higher education, it should be noted that the proportion of females exceeds 50% in some courses of study. These include dental medicine (74.3%), trade and management (61.7%), education sciences (59.6%) and medicine / pharmacy (57.4%) .

The national education charter

Morocco launched in 1999/2000, the national education and training charter which set three main goals.

- The generalisation of education and the improvement of its quality and performance
- The achievement of structural coherence of the system on the basis of complementary levels: an internal integration system and its attachment to its socio-economic environment.
- Modernising the system procedures management.

Education and scientific research

The objectives of the **national strategy for scientific research** for 2025 are:

- Governance and performance of the national research and innovation system;
- Promotion, motivation and mobilisation of human resources;
- Diversification of funding sources, with the ultimate aim of improving financial management of research activities;
- Scientific performance of research activities and structures;
- Improving scientific, research and development and

innovation infrastructure ;

- International cooperation (political, capitalisation and enlargement : Africa and the Arab World, joint research programmes, scientific exchange)

The protection of the environmental and sustainable development have a prominent place in the **national strategy for scientific research** in 2025 and the emergency program of the ministry of higher education, scientific research and training of executives.

Qualification and professional integration

In a context of economic openness and international competition, access to education, training and all forms of knowledge have become key requirements. Employment

is the main form of social integration, the safest factor in improving living conditions and protecting against the risks of poverty and vulnerability and most appropriate tool for assessing the level of social cohesion in a country. Total employment for the most part does rarely conform to the standards of decent employment. Thus: generally one worker on three is a degree-holder, nearly 2 of 3 employees work without a contract; nearly 8% of the total volume of employment is rather seasonal or occasional, less than 20% of the workforce has of medical coverage.

The Moroccan higher education system is not adapted to the challenges. The main shortcomings highlighted in this system are: the problem of inadequate training / employment, training teachers and the «tropism shown in favour of literary subjects to the detriment of scientific courses of study.»

Several reforms were implemented:

The **national charter for education-training** addressed the reform of vocational training within the framework of the comprehensive reform of education and training while taking into account the genuine momentum of the system's development since its reorganization in the mid 80s.

Two types of provisions are noteworthy in this regard:

- The anchoring of vocational training in the workplace, enhancing the dynamics of investment in the human resources of enterprises and partnership development. These provisions were accompanied by the strategic goal to qualify 50% of people who enter each year the labour market by 2010 against 20% in 1991.
- The integration of the practical dimension in the educational process to lead eventually to a new educational structure comprising:
 - A professional specialisation under the form of apprenticeship;
 - An integrated cycle of integrated professional qualification in secondary education ;
 - A course of technological and professional education ;

To reinforce this link, a bridge between education and training cycles were new recommended.

The ministry of national education, higher education, the training of executives scientific research (MENESFCRS) developed an **Emergency Program «2009-2012»**, which precisely and concretely defines the acceleration programme of reform completion. The three axes involving the university are: promoting the initiative and the excellence in high schools and universities, addressing the cross-cutting issues facing the system and providing the necessary means for its success.

The three basic principles namely autonomy, professionalisation and contracts have served as a guide to the design and articulation of the goals of the programme to meet the real needs of universities in terms of infrastructure, diversification of training, excellence promotion, governance and openness to the socio-economic environment. These projects have been translated into concrete actions, budgeted and their realisation was planned during the 2009-2012 period. They are subject to four-year contracts between the state, universities, the national center for scientific and technical research (CNRST) and the national office for university social and cultural works (ONOUSC).

The Emergency Program has identified the path for universities to follow in order to meet the major challenges they face, particularly, increasing their hosting capacity and improving the quality of training to support the major projects launched by the State, such as the national pact for industrial emergence and the new global businesses in Morocco, Azur plan, the green Morocco plan, the National Initiative for Human Development, the energy initiatives plan, the 10,000 engineers and 3300 doctors initiative, etc.

Challenges to meet

Continuing the fight against illiteracy

In terms of illiteracy, the progress achieved compared to the legacy of the protectorate is remarkable.

- The illiteracy rate for the over 15 years age category decreased from 90% at the dawn of Independence to 48% in 1998 and 39.7% in 2010.
- The literacy rate of the population aged of 10 years and over, has been estimated at 60.3% in 2009 against 45% in 1994. In rural areas it increased from 25% to 44.4%
- The literacy rate for young people aged between 15-24 years increased from 58% to 79.5% between 1994 and 2009. This improvement was more remarkable among females, whose literacy rate increased during the same period, from 46% to 72.1% against 71% and 86.7% for males.

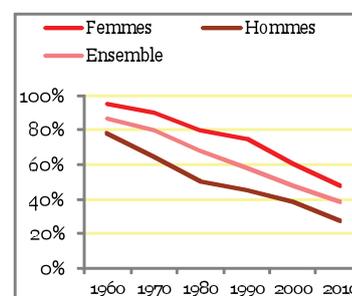


Figure 14 : illiteracy rate

Despite substantial financial effort dedicated to education, illiteracy is still a blight affecting human development in Morocco. Given these shortcomings, the fight against illiteracy was elevated to the status of a national priority and a ministry was set up in this respect. The commitment of public authorities is mirrored in the continuous increase in the state budget for the education sector which rose by 33% in 2010 compared to 2008, reaching about 24% of the state's budget and 6.4% of GDP.

Several major programs have been implemented (the national education and training charter, the national education and training decade, the national initiative for human development), reinforced by the action of civil society to reduce the impact of this blight on the economic and social development. The first results started giving their early fruits.

Reinforcing the generalisation of quality

Assessments carried out in recent years show that despite the undertaken efforts and the progress made in the education, the sector continues to be affected by several obstacles that reduce the pace of its development. Poverty and isolation are the main exogenous hindrances to schooling and the main cause of school dropout. Other endogenous factors are linked to the quantity and quality of infrastructure in rural areas.

Besides the generalisation of education, the educational training system should address the challenge of quality and meet the requirements of the 21st century. Improving the quality and the performance of the schooling system could take advantage of lower population pressure: less than 15 years old children reached 9.6 million in 1994 and they are expected to be 8.6 million by 2025. Their share in the total population would decrease from 37 to 22.1%.

A vocational training that meets the needs of the job market

The education and training system should respond effectively to the demands of socio-economic development and ensure the maximum equality of opportunity for academic and professional success, while upholding cultural and social diversity through promoting the values of tolerance, progress, non-discrimination and citizenship. New branches emerge and must absolutely be given special attention. It will be difficult to support the development of these branches and ambitions without a skilled workforce. From a qualitative point of view, green jobs (renewable energy, management and re-use of waste) offer a good opportunity. Indeed, forging ahead with these new jobs will be a competitive advantage for Morocco in the region and represent a potential for exports and know-how.

3. Fight against poverty and exclusion

According to a UNDP report, in the wake of independence, poverty affected more than one Moroccan out of two. The efforts undertaken in the past fifty years have allowed significant progress, since today only 3.6% of the population live below the poverty line.

Results : a net improvement of the poverty rate– Goal 1 of MDGs is met

In recent years, Morocco has been engaged in the fight against poverty and exclusion. 20% of public spending are now earmarked to basic social services. Various initiatives have been planned, including the national initiative for human development (INDH) launched since 2005.

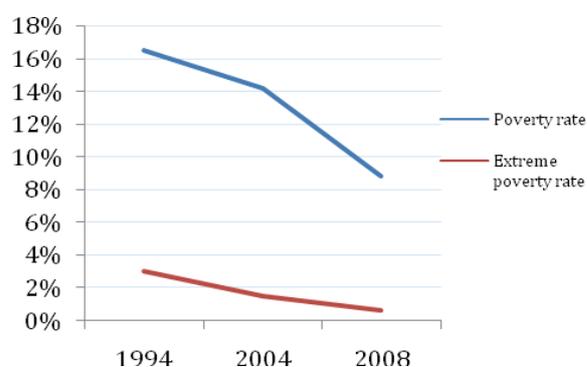


Figure 15 : poverty rate

The national initiative for human development (INDH)

The national initiative for human development (INDH), is an innovative initiative in Morocco designed to reduce poverty, social exclusion and precariousness, as part of a global vision of social and human development for the country.

The INDH is a participatory community development programme, which means that it is the residents of target communities themselves who will express their needs for equipment and social services, support for income generating activities, capacity building and community leadership. The programme targets 360 rural communities that have a poverty rate of over 30% and 250 urban districts where social exclusion conditions are acute. The needs identified are studied in each municipality or district and are funded as part of a «local initiative for human development.»

INDH activities in rural areas aim at reducing poverty and exclusion of rural citizens. Goals in urban areas aim at enhancing integration, social cohesion and improving the conditions and quality citizens' lives. The planned

actions can be grouped under four headings:

- Promoting access to basic infrastructure, proximity services, social equipment and basic urban infrastructure
- Boosting the local economy through revenue and employment generating activities
- Supporting social, cultural and sporting activities
- Strengthening governance and local capacity.

The INDH establishes a process for human development, consistent with the MDGs which aim at:

- Respecting human dignity,
- Protecting and promoting the rights of women and children,
- Boosting the citizens' confidence in the future,
- Involving and integrating all citizens in the economic cycle

The Initiative is based on a decentralised approach that respects the following principles:

- Participation,
- Strategic planning,
- Partnership and convergence of actions,
- Good governance,

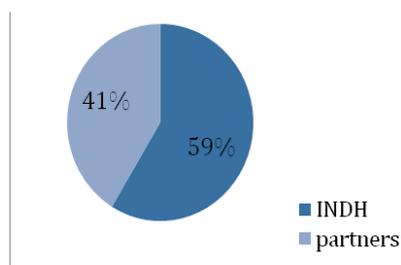


Figure 22 : INDH

Results for 2006 - 2010

- 5.2 Millions beneficiaries
- Over 23 000 projects or actions
- 14 billion dirhams of investments

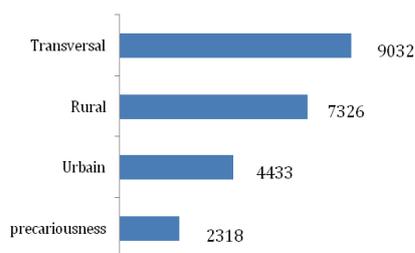


Figure 17 : INDH projects 2006-2010

For the 2011-2015 period, a budget of 17 billion dirhams was allocated to the INDH. This budget was funded by the state's budget (9.4 billion dirhams), local collectivities (5.6 billion), ministerial departments and public institutions (1 billion) and international cooperation (1 billion) .

Concerning the second phase, the initiative will expand its scope of action to 701 rural communes and 530 underprivileged urban districts. In this respect, a new programme of territorial development will be launched directly benefiting one million inhabitants in 3300 villages (douars) in 22 provinces. This programme aims at achieving several objectives notably improving the living conditions of the population in mountainous and hard-to-reach area, reducing disparities in terms of access to infrastructure, equipment and basic proximity services (rural roads, health, education, water and electricity) as well as integrating the population of these areas in the momentum spurred by the INDH.

The INDH Strategic interest : this initiative has created a genuine social proximity momentum and stands as a model of sustainable development through its creation of 3000 revenue generating activities and 40,000 job opportunities.

Fight against exclusion: women and children

Chapters 20 and 24 of Agenda 21 of Rio deplored that women are so far the poorest category and called for plans to reduce poverty in each country.

Despite the existence of a genuine desire to fight exclusion and vulnerability, women, as they are more likely to suffer unemployment, still focus too much on insecure and poorly paid activities (agriculture, seasonal work, maids). Children also remain highly affected by exclusion and poverty.

Various reforms tend to restore equality between men and women and protect children including:

- Amendment of the Penal Code to strengthen the protection of women and children
- Reform of the Law on the legal collection of children «Kafala» allowing single woman to collect a child. Before, only married women had this right.

In terms of civil law, the establishment of equality is becoming the rule. This was reflected in the comprehensive reform of the Family Code, the legislation governing civil status, the provisions of the Penal Code and all anti-discrimination measures.

- The reform of the Family Code (Moudawana) stirred a development in women's rights. Women became free

to marry without a guardian.

The minimum age for marriage was set at 18 for women and men instead of 15, which leads to an extension of the schooling period for women.

- Repudiation is no longer a solely husband’s right. The decision should be subject to judicial authorities.
- A woman can ask for divorce without having to prove the reasons for his request. It is the state forces the husband to pay deposits as «compensation».

But despite the establishment of courts to enforce the new family code, considerable efforts still needed be undertaken so that women, especially in rural areas, become aware of their rights and be fully protected.

4. Opening up rural areas and mastering urbanisation

Emergency of a social and infrastructure upgrading

At the beginning of the 90s’, the rural world was suffering developmental delays due notably to isolation and the lack of basic services and infrastructure: roads, water, electricity, health, education, etc...

The conclusion was drawn: landlocked due its low accessibility (in1995, only 36% of the rural population had access to a road), devoid of basic resources (in 1994, only 14% of the population had access to drinking water) and with low access to electricity (15% of households), economic or human development remained inconceivable.

The Moroccan authorities decided to break with this situation. Large-scale programmes were undertaken, targeting primarily the previously identified disabilities: PNRR1, NRRP2, PAGER, PERG, vaccination campaigns, rural education, fight against adult illiteracy, mobile clinics, cancelation of small farmers’ debts, fighting desertification and drought aid. Such projects were designed, implemented and followed up the highest state level.

PNRR 1 /PNRR 2

Issues

- Opening up rural areas and building roads
- Improving access to basic services (education, health, etc) of the rural population
- Allow for the emergence of economic activity and the diversification of revenue sources in rural areas

Goals

- PNRR1 : (1995-2004) building of 10 000 km or rural roads;
- PNRR2 : (2005-2015) building 15 000 km or rural roads.

Results

- 2012: rate of road access 80%.
- Two-fold increase in the frequency rate for care centers
- Three-fold increase in the primary schooling rate.
- Goods transport cost decreased by 50%

Year	Rate of Access (%)
1995	36%
2012	80%

Figure 19 : rate of access to roads in rural areas

PAGER

Issues

- Reduce precariousness due to the lack of potable water
- Fighting epidemics like cholera which was rampant during 1988-1994
- Improving the education of young girls, often responsible for the daily water supply (from nearby sources)

Goals

- Supplying 31 000 rural localities benefiting 12 million people (2010)

Results

- 2012 : access rate to potable water 92%.
- In 2004 the programme received the UN Public Service Award in the category of improving the performance of public services

Year	Rate of Access (%)
1995	14%
2012	92%

Figure 18 : rate of access to potable water in rural areas

PERG

Issues

- Enabling isolated rural communities to electricity access

Goals

- Generalising access to electricity in rural areas

Results

- 2012 : electrification rate reached 97,4%.
- Emergence of new revenue generating activities and small enterprises.
- Increasing schooling rates
- Slowing the pace of rural exodus.
- Improving housing by equipping households with appliances.
- Decreasing spending on lighting by substituting traditional means.

Year	Accessibility Rate (%)
1995	15%
2012	97,4%

Figure 20 : accessibility rate in rural areas

This adds to the rural development strategy based on a territorial approach through participation in financing projects whose objectives include:

- Preservation of natural resources ;
- Improving water accessibility;
- Preserving biodiversity;
- Fighting floods;
- Improving living and housing conditions.

A total of 76 projects covering all regions of Morocco have been launched.

In a decade (1995-2005), the immobility of the «hinterland» gave way to action and confidence. The countryside is now an integral part of sector-based public policies, which have been adjusted to take into account the specificities: geographical, socioeconomic, cultural, environmental, etc..

From basic education to the production of clean energy (solar, wind etc) to agriculture and tourism, are all dimensions to support the development of rural areas.

Alongside the efforts to develop rural areas, a new policy was adopted for major cities to become competitive and achieve a metropolitan level, particularly as the urban population will double in the next twenty years. Currently 60% of Moroccans live in cities, urban centers

with stronger structures, economic activities and own needs, have seen the pace of development increase with the launch of programmes of all kinds:

- Development of new urban centers (Tamesna Sala al Jadida, etc.);
- Absorbing the housing shortage: through economic and social housing and the cities without slums programme ;
- Boosting training and employment (promoting private education, supporting employment through the employment promotion agency (ANAPEC)) ;
- Grouping and developing activity zones (technoparks, industrial zones, logistics zones and handicrafts zones, etc...)
- Development of social services and proximity facilities (regional hospitals, cultural and sports venues, etc...)

However, it is necessary to change the Moroccan strategy of urban development so that it takes sustainability into consideration in order to meet the challenges relating to social cohesion, urban planning and pollution control. The reconciliation with local decision makers is the key to success and will obviously be favored by the law on decentralization.

Environmental pillar

The Earth Summit in Rio in 1992 was characterised by the awareness of the international community of environmental issues which increasingly affect countries sustainable development choices and the capability to ensure a certain and harmonious future with their ecological capital.

Following the summit, Morocco created a ministerial department for the environment headed by a Secretary of State under the aegis of the Ministry of Interior. In twenty years, this department underwent several major changes. Its powers and duties were enlarged in 2000, and its budget was boosted since 2005, while its capacity and territorial coverage were reinforced. It would also be wrong to entrust the measures for the protection of the environment to this department. Indeed, awareness of these issues has resulted in a

gradual coordination between all stakeholders. NGOs organise themselves and form a local relay performance. Economic operators, for their parts, are grouped in committees or focus groups following the example of the sustainable development commission created by the general confederation of Moroccan enterprises (CGEM).

The evolution has been remarkable as the rhetoric of environmental protection has evolved into the notion of sustainable development, a much broader concept that requires the establishment of new exchange and observations mechanisms as well as concerted action plans which position Morocco as a committed player with a forward-looking vision based on sustainable development.

1. Irreversible Commitment : the operationalisation of the environmental action on track

Morocco's resolve to designate the environment a national priority was confirmed at the highest state level.

This resolve is reflected in:

- Strengthening the institutional framework: Following the Rio 1992 Summit, Morocco created a ministerial department tasked with conducting government's environment protection policy. The importance of actions led by this department in favour of the environment and sustainable development and the means at its disposal have increased throughout the years. Today, the environment department is part of a large ministry which also covers mines, energy and water. Other public, semi public and private entities are also involved in environmental management and sustainable development. Many specialised agencies have begun recently to emerge, particularly in the field of renewable energy. In addition, Morocco has a range of institutions and councils that provide the framework for consultation and participation venues for all stakeholders in environmental decision making (national environment council, high council for water and climate, higher council for planning ...)
- Strengthening the legal framework through the enactment of environmental laws. According to Principle 11 of the Rio Declaration, which recommends that «States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and development context to which they apply». Considerable progress at the legal level has been made primarily through the national environment charter which gives constitutional status to the ecology. They have resulted in the adoption of two categories of texts: laws that increase protection for the environment – law on water, law on impact studies, law on the fight against air pollution, law on waste Management, law on protected areas, law on degradable and biodegradable plastic bags - and other recent legislations geared towards sustainable development namely - law on renewable energy, laws relating respectively to the creation of the national agency of renewable energy and energy efficiency and the Moroccan agency for solar energy. Other texts are being elaborated such as draft framework law on of the national environment and sustainable development charter.
- Strengthening follow-up, assessment and prevention tools through the creation of the national environment laboratory, the establishment of the national

environment observatory and the regional environment and sustainable development observatories, the definition of sustainable development indicators, the creation of the national committee and regional committees to study the impact on the environment. The evaluation process of the studies of the impact of investment projects on the environment has been progressively implemented in Morocco through several stages. Between 1994 and 2003, the studies were performed on a voluntary basis by project promoters or those designated by international donors or for reasons relating to the sensitiveness of a particular project's place or for arbitration of conflicting views regarding land use.

The second stage 2003-2008, began with the adoption of Law No. 12-03 on the studies of the impact of investment projects on the environment, which became the legislative reference to the principle of the impact study. Even in the absence of regulations governing the application of this law, a procedure to examine the studies of the impact on the environment was established at the national level.

With the enactment in 2008 of Decrees on the implementation of Law No. 12-03, the assessment process of the impact on the environment studies has entered a new milestone marked by the strengthening of the role of the national committee, the decentralization of this process through the establishment of regional committees and the taking into consideration of concerned population's view point in the projects environmental assessment through public inquiry. This required great efforts in terms of organisation, adoption of a structured approach in order to conduct related procedures and capacity building of various stakeholders in this process.

- Strengthening of economic and financial mechanisms through the setting up of national funds (the national environment fund, the industrial pollution control fund, the cleanup fund and sewage and waste water treatment fund, the energy development fund ...), but also new cooperation mechanisms (grants, agreements, public or private partnership) to support the measures undertaken to protect of resources and environments.
- Strengthening international cooperation through contributing in international efforts by implementing commitments, developing cooperation projects at regional and sub regional levels and strengthening South-South and triangular cooperation.

- Finally promoting awareness raising (Hassan II Prize) and communication. Citizen participation in protecting the environment is necessary for promoting eco-citizenship actions. Thus, the state's support boosts associations' actions.

The Ministry of Education, like other government constituents civil society stakeholders, has placed priority on the protection of the environment.

The main objective of the actions taken by the Ministry of national education lies in transforming the school into a place of environmental education. Several programs have been launched such as:

- Integrating sustainable development notions in the curriculum.
- Generalising the ecological schools programme.
- Environmental upgrading in rural schools

These projects aim at :

- Promote and develop education about the environment and sustainable development.
- Mobilise educational players for environmental issues

- Set up awareness raising programmes and educational programmes about the environment and sustainable development in schools.

- Make of today's pupils responsible citizens in the future.

Despite these reinforcements, environmental problems continue to grow at various territorial scales and the state's assessments underscore the seriousness of the situation which is marked by an intense degradation of natural resources and the living conditions of the population due to pollution of air, inland and marine waters, desertification, forest and biodiversity degradation.

This state has a negative impact on human health and the economic development process due to the depletion of some natural resources to ensure sustainable development of the country.

Given this situation, the action has recently focused on environmental upgrading composed of several major programmes, such as the national sewage programme and the national household waste management programme.

Studies of the impact on the environment

Law 12-03 mandates the conduct of studies on the environmental impact for projects that are likely, because of their location, to affect negatively the biophysical and human environment. Most infrastructure projects are concerned. These projects are subject to a national committee of impact studies to check if their cost exceeds 200 million dirhams. The law applies to legal entities and individuals, public and private. It establishes specific penalties in addition to those related to civil or penal responsibility.

Waste management

Law 28-00 provides for protecting protect human health, fauna, flora, water, air, soil, ecosystems, sites and landscapes and the wider environment against the noxious effect of waste. It defines and classifies them and establishes obligations regarding management and elimination. The law specifies that they must be reduced in quantity and noxiousness during their life cycle. Obligations are also imposed for different types of waste. Holders, producers and users of waste are concerned.



Renewable energy and energy efficiency

Law 13-09 aims to develop national renewable energy sources. It establishes a legal framework opening prospects for building and operating facilities for producing electricity from renewable energy sources. It specifies the general principles to follow, the relevant legal framework including marketing and export. Implementation decrees should be published soon. A draft law on energy efficiency, which may require companies to carry out energy audits at a certain consumption threshold is under examination. A code of energy efficiency in buildings is also under preparation.



Air pollution

Law 13-03 for the prevention and fight against the emission of air pollutants that may harm human health, wildlife, soil, climate, cultural heritage and the environment in general. It applies to any person or entity subject to public private law, owning, holding, using or operating buildings or facilities relating to mining, industry, trade, agriculture, crafts, vehicles or gear motor, combustion appliances, waste incineration, heating or refrigeration. It establishes specific penalties

For the specific case of air pollution generated by the transport sector, a programme of actions and measures is proposed for the short and medium terms. These actions include improving the quality of fuels, vehicles, air quality control system and urban transport management, etc..



Water management

Law 10-95 on water completes the Royal decrees (Dahirs) (1914, 1919, 1925) relating public water. It defines a system for its conservation and protection. It prohibits building on the waterways and canals and bans all obstacles to the free flow of water. It also prohibits making or removing any deposit, or plantation or farming in the public water sphere. The law also organizes the institutional management of water and sets penalties.



PNA : National sewage programme

Until 2005, the sewage sector in Morocco was not given due attention. This led to a considerable degradation of the quality of water resources, spheres and the natural environment in general, threatening resources and population health

In order to redress this situation, the government launched in 2006 the national sewage programme (PNA) with the aim of:

- Achieve a total rate of connection to the sewerage system in urban areas of 75% in 2016, 80% in 2020 and 100% in 2030.

Achieve wastewater treatment rate of 40% in 2016, 80% in 2020 and 100% in 2030.

- Treat and reuse wastewater at tertiary level by 50% in 2020 and 100% in 2030

Investing: 50 billion de Dirhams by 2020



Figure 21 Sewage treatment plant in Beni Mellal



Figure 22 : Sewage treatment plant of Ain Taoujat

PNDM : national programme for household waste management

The increase in urban population along with the proliferation of suburbs complicated the collection, removal and the elimination of household and assimilated waste, whose production in urban areas is estimated at 5 million tonnes per year, that is a ration of 0.76 kg per capita per day. This waste is often eliminated in dumps or in black points and rivers without any treatment. This situation has serious consequences both on public health and the environment.

To overcome the various problems, the government launched the national household waste management programme (PNDM) which consists of:

- Ensure the collection and cleaning of household waste to achieve a rate of 85% in 2016, 90% in 2020 and 100% by 2030.
- Conduct landfills of household and assimilated waste for all urban centers with the aim of reaching a rate of 100% in 2020.
- Rehabilitate or close all existing landfill sites with a view to reach 100% by 2020.
- Upgrade the waste industry by professionalising the sector.
- Develop the industry of «sorting-recycling », with pilot screening, reaching a recycling rate of 20% by 2020.
- Train and sensitise all stakeholders to the waste issues.

Investment: 40 billion dirhams



2. Climate : local impact, global challenge

Climate change is a major challenge for the Moroccan economy and growth. The vulnerability of our country is high, due particularly to:

- The importance of agriculture in the economy (15% of GDP) and in creating job opportunities (40%).
- The lack of efficient risk management mechanisms.
- The low capacity of strongly growing sectors in urban areas to create new jobs and absorb the surplus of workforce coming from rural areas.
- A large range of irrigated agricultural products designed to be exported (15%). This is produced with an overuse of water resources.

In this regard, Morocco is set to continue supporting the international community's efforts to address climate change challenges.

Morocco has indeed signed the UN Framework Convention on Climate Change in 1992 and ratified it in 1995. It also hosted in 2001 in Marrakech, the Seventh Conference of the Parties (COP 7), which implemented the Kyoto Protocol. It ratified the Protocol in 2002.

In negotiations within the framework of the Convention and Protocol, Morocco belongs to the Group «Africa», and the Group «G77 plus China» as a developing country. It contributes to the positioning of these Groups. Morocco is a low emitter of greenhouse gases, but it is strongly affected by climate change

Morocco's strategy in the fight against climate change is guided by two principles.

On the one hand, to address the causes of climate change, Morocco volunteered to proportion its economic growth with the greenhouse gas emissions. Morocco is aware that the implementation of a policy to mitigate climate change by reducing emissions of greenhouse gases contributes to the achievement of overall development, notably thanks to the introduction of clean technologies.

On the other hand, to deal with the consequences of climate change, Morocco intends to preserve its land and civilization in the most appropriate way, by effectively tackling the vulnerabilities of its territory and anticipating an adaptation policy that prepares all its population and its economic payers to cope with these

vulnerabilities.

To address these issues a programme to fight against global warming was adopted targeting three main areas:

- Developing a policy against global warming at the national level.
- Taking actions on the ground: designing and implementing projects to adapt to climate change.
- Morocco's international commitment :
- Completing the second national communication on climate change and the launch of the elaboration process of the third communication
- Contributing to international efforts to curb greenhouse gas emissions.

Mitigation measures in Morocco target the sectors of energy, transport, industry, waste, agriculture, forest and construction.

The overall mitigation potential of these measures was estimated at 53 million tonnes of CO₂ per year by 2030.



Figure 23 : Greenhouse gas emission

Oases, an endangered heritage

Given the role they play as a shield against desertification, Oases have many other environmental functions. They have a biological diversity and they structure and organize social life. The oasis sphere covers 15% of Morocco's surface area, that is 115,563 square kilometers with 1.7 million people making up 5.3% of the Morocco's total population. It is crossed by a water system which has an average flow of 25 m³ per second with a mobilisation of over 1.1 Million m³ mainly used in agriculture (98%)

The oases ecosystems are in a phase of extreme degradation. These figures illustrate this situation: ground water had its levels decrease with an average ranging from 15 to 20 meters. Date production followed a falling trade of 34%.

The UNESCO listed the Oases of the south as a biosphere reserve in 2000.

In order to preserve these unique environments, three programmes were launched:

- The programme of the Oases of Tafilalet : a pioneer experience in terms of sustainable territorial development.
- The southern oases programme. Led by the South promotion agency in partnership with the UNDP, this programme enabled the reinforcement of capacities of local communes in terms of planning and sustainable development of Oases.
- The African programme for adaptation to climate change-Oasis, funded by the Japanese cooperation and supervised by UNDP, helped manage and reduce risks posed by global warming in the production systems of Morocco's oases, through the introduction of innovative adaptation approaches and strengthening of local capacities.



Figure 24 : An oasis in southern Morocco

3. Water :an integrated management

The management of the water issue by Morocco, is a major challenge requiring meticulous analysis.

Due to its geographical location, Morocco is characterized by a climate with a high contrast marked by rainfalls dominated by a highly irregular in space and time. Indeed, the potential of natural water resources is estimated at 22 billion m³ per year, of which 18 billion m³ is surface water and 4 billion m³ is groundwater), this represents the equivalent of 730 m³ per capita per year, which falls within the framework of water scarcity that is below 1000 m³. This level could drop to 530 m³ by 2030 under climate change effects.

Over half of these resources are concentrated in the northern basins. In addition, water supplies are very irregular in time: they can vary in a ratio from 1 to 9 years (annual inflow of 47 billion m³ in 1962 to 1963, against less than 5 billion in 1992-1993). They are also spatially variable: flows per capita may vary in a ratio from 1 to 8 between the basins (renewable resources 1200 m³ per capita per year in the Loukkos, against 141 m³ per capita per year in Bouregreg)

Given the fact that water potential of the country remains limited because of the scarcity of water resources and their degradation as well as their low

promotion, the needs of different sectors that use water are constantly increasing, particularly in the agricultural sector, domestic or leisure uses, and the tourism and industry sectors. This adds to institutional shortcomings marked especially by the multiplicity of players, which is conducive to optimal coordination of policies in the water sector. Moreover, the groundwater level had decreased significantly :

Water potential (Billion m3)

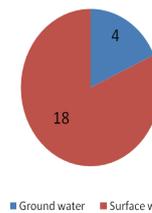


Figure 25 : surface and ground water in billion m3

Alarming decrease in piezometric levels

Souss groundwater



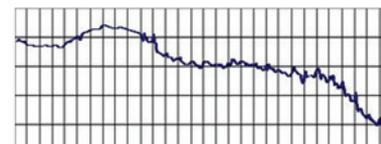
24 meters in 34 year

Sais groundwater



64 meters in 25 years

Haouz groundwater

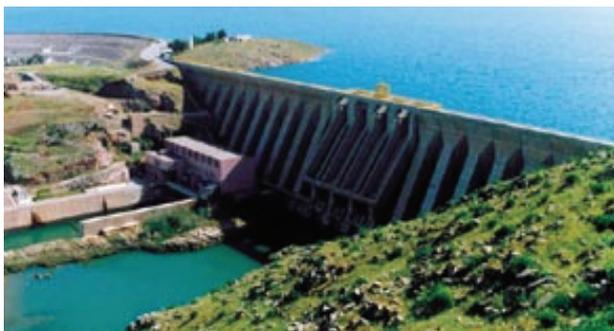


18 meters in 24 years

Figure 26 evolution of groundwater levels

In this context and to support its development, Morocco has long been engaged in a process of mobilising and controlling its water resources and has adopted an integrated planning and management approach of its water resources.

This policy enabled Morocco to build important water infrastructure consisting of storage structures and water transfer (to mobilize more than 75% of surface water) and thousands of sinkings and wells to capture groundwater.



This infrastructure guarantees:

- Potable water supply for the population;
- Large scale irrigation (around 1.5 million hectares) ;
- Support for the development of other social and economic sectors;
- Protection against floods in large territories that suffered considerable damage in the past;
- Hydro-electric production of benefiting 10% of the total

population.

Besides this policy of supply management, efforts have been devoted as part of the national water strategy, with a special focus on demand management through strengthening public support for water conservation, in addition to boosting the institutional and regulatory arsenal.

4. Forest & Biodiversity: a wealth with steady efforts to preserve it

Morocco has a diverse eco-system and landscape, with 40 types of large natural ecosystems that is home to over 4500 species of vascular plants, nearly 550 species of vertebrates species and thousands of invertebrates including many endemic species. These resources, which are subject to multiple natural and anthropogenic pressures, evolve according to a differentiated ecosystem dynamic and socio-economic and ecological context.

In response, Morocco has initiated proactive measures to reverse the trend of desertification and mitigate its scale through sector-based planning and integrated territorial operationalisation.

Sector-based planning

Several environment and sustainable development plans, strategies and programmes emerged after the Rio Summit (1992), including:

- The master plan for managing and protecting rainy areas (1994)

- the master plan for protected areas (1995) ;
- Development strategy for rangelands (1995);
- Master reforestation plan (1996) ;
- National development plan for watersheds (1997) ;
- National forestry programme (1998);
- The master plan for the fight against forest fires (2001);
- The national strategy for monitoring and following-up conditions in forests (2008) ;
- The national strategy for the development of urban and peri-urban forests (2009).

participatory approach in relation to the conservation and development of forest resources.

Towards a futuristic integrated vision: updating the programme to combat desertification (PANLCD 2030)

An approach with two stages:

- Tools for greater integration and synergy of sector-based programmes
- An observation system set up by homogeneous zones

Goals:

1. Sustainable management of natural resources by promoting their potentials and reducing human pressure;
2. Diversifying activities by, inter alia, revenue generating activities in order to improve the population's living conditions;
3. Determining the advantages of an efficient implementation of PANLCD (reducing poverty) ;
4. Ensuring a better awareness about desertification and the degradation of lands;
5. Mobilising resources in favour of the implementation of PANLCD through partnerships at the national and international levels.

Vulnerability to desertification and soil degradation

Methodology

The vulnerability to desertification index is calculated by integrating four indexes:

- Erosion index
- Vegetation quality index
- Climate quality index
- Overgrazing index

Combining the maps on the aforementioned indexes allowed for elaborating the map of desertification vulnerability

Category	description categories	limits	National surface
1	description categories	≤ 1.26	18
2	Low vulnerability area	1.26 - 1.36	9
3	Moderately vulnerable area	1.36 - 1.46	18
4	Very vulnerable area	> 1.46	8
5	hyper arid zone	Sensibilité variable	47

The elaboration process of these sector-oriented plans is the result of an approach based on the diagnosis of the situation, identification of constraints and the definition of a new intervention approach.

Other plans are developed and have instead a horizontal target of integrated development. These include the national action programme to combat desertification (PANLCD, 2001) and the national initiative for human development (NIHD, 2005) focusing on areas such as the fight against poverty and reinforcing the

Updating the programme to combat desertification (PANLCD)

Based on the multidisciplinary and diversity of players, a collaborative approach and the formal use of analysis tools, the implementation of PANLCD depends on a four-stage gradual approach:

1. Determining homogeneous areas for the implementation of PANLCD
2. Organising regional workshops to diagnose the situation by area
3. Elaborating and adapting decision making assistance tools
4. Strategic planning and action plans adapted to the needs of each area

Biodiversity conservation, a firm commitment:

In consistency with the provisions of the convention on biodiversity, which provides for the protection of 10% of territories, the master plan of protected areas has identified over 150 sites of biological and ecological importance, covering all of its ecosystems on a surface area exceeding 2.5 million ha.

In this context, 10 national parks, stretching over a surface area of 750,000 ha have been given development and management plans which are currently being implemented.

To implement this strategy, a new law on protected areas was enacted in July 2010, incorporating the five categories (national and nature parks, nature reserves, biological reserves and natural sites) adapting the criteria which apply to the socioeconomic context of countries.

This strategy, which aims to search for new ecological balance and management methods compatible with the different components of the environment, is implemented in three stages:

- A **stage of ecosystems restoration**, consisting of a rehabilitation of habitats and species (natural revegetation, enhancement and reintroduction of animal populations etc.)
- A **stage of planning and development**, consisting of a site servicing of the protected area through setting up infrastructure and equipment necessary for its

operation and ensuring the stability of these spaces

- A **promotion stage of the protected area**, through the development of ecotourism and other economic activities compatible with conservation goals and sustainable land management.

Achievements in terms of forests and terrestrial biodiversity:

They revolve around:

- Demarcating and securing 98% of the 9 million hectares of forests while guaranteeing the rights of use for the local population.
- Fighting forests degradation through reforestation, regeneration and improving forest grazing by increasing the pace of plantations from 20,000 ha per year in 1992 to over 40,000 ha per year in recent years, giving priority to native species (cedar, cork oak, Argan...).
- Control of water erosion in 18 out of the 22 priority watersheds. The appropriate mechanical and biological methods allow for the preservation of water resources, agricultural land conservation and the protection of hydro-agricultural infrastructure
- The fight against silting-up through the treatment of erosion zones in coastal and inland dunes on 36,000 hectares to protect towns, oases and infrastructure.
- The management of forest fires, through the establishment of a prevention, risk management, early warning and coordinated response mechanism, led to the decline in the average area affected by fire from 14 ha (1960 -1995) to 9 ha (1996-2006) to 4 ha currently
- Monitoring the status of forests through the



Reforestation to recreate forests: 670,000 hectares were reforested, that is more than the 500,000 hectares provided for in 1993




Anti-erosion works (sedimentation threshold, banquettes...) as part of developing watersheds




Fruit plantations as part of developing watersheds

Protecting main coastal cities (Agadir, Essaouira, Kénitra, El Jadida, Laayoune...), 35 village in the south, 10,000 palm groves and 26 kilometers of roads

establishment of an adjustment and monitoring plan that can respond to early wilting and pest attacks.

- The identification of over 170 urban and peri-urban forests that contribute to the wellbeing of 14 million people in 50 cities in the Kingdom. The implementation of a strategy dedicated to these forests serving both the environment, the landscape and the people through, on the one hand, the organization of the public reception in 40 forested sites by open air accommodation and environmental education to improve knowledge about the frailty of these forest environments.

5. Between the sea and the ocean :

Morocco a coastal country

The Morocco has a coastline that stretches along the Atlantic coast from Cape Spartel to Lagouira (2934 km) and on the Mediterranean coast from Cape Spartel to Saidia (512 km).

With an exclusive economic zone of 200 nautical miles and nearly 3,500 kilometers of coastline, the coastal sector in Morocco is over 1 Million square miles of water.

In addition, the Moroccan coast is a crossroads where waters from different origins mix (Boreal, Mediterranean, Atlantic, upwelling, etc..). Characterised by an exceptional diversity (5.44% of the total species in the planet, with an endemic rate of nearly 3.31%), these waters also have high fertility and are considered as the

one of the worlds most stocked with fish.

Morocco has certainly been a pioneer in upholding its commitment to preserve its biological heritage, however, like any coastal country, it continues to face difficulties in safeguarding its space & marine ecosystems in all their components: marine waters, coral reefs, lagoons, estuary, estuaries, fauna and plant biodiversity

These difficulties are due to :

- **The increasing demographic** pressure on coastal lines: 50% of the country's population in 2000, with a growth rate of to 2.77% per year, against 2.5% per year for the total population;
- **Erosion** due to the extensions of human activities & infrastructure (roads, factories, resorts, etc.): taking 1000 ha per year of forest & coastal areas.
- **Pollution** caused by untreated domestic, industrial, shipping waste and accidental pollution, etc..
- **The limits of marine ecosystems scientific** monitoring and protection means: observing regulations relating to deep sea fishing, etc..
- **The still** limited awareness about sustainable exploration;

Recognizing the importance of its heritage and its marine resources for the present and future generations, Morocco has launched several projects for their preservation.

PDAP : Master plan for protected areas

Morocco has established a national network of protected areas to preserve its natural heritage and biodiversity, as master plan for protected areas that is being implemented gradually. This network targets 160 sites of biological and ecological importance (SIBE), developed into parks or reserves.

Among the numerous parcs and reserves, we can mention:

Parcs :

- The national parc of El Hoceima
- The national Souss-Massa parc
- The national parc of Dakhla

Reserves :

- The Khnifis reserve
- The Essaouira Island reserve
- Oualidia-Sidi Moussa reserve
- Sidi Boughaba reserve
- Merja Zerga reserve
- Marais of Larache reserve
- Cap des Trois Fourches reserve
- Marchicha reserve
- Moulouya embouchure reserve.



Natural reserve 40 km away of the norther city of Nador on the Mediterranean.



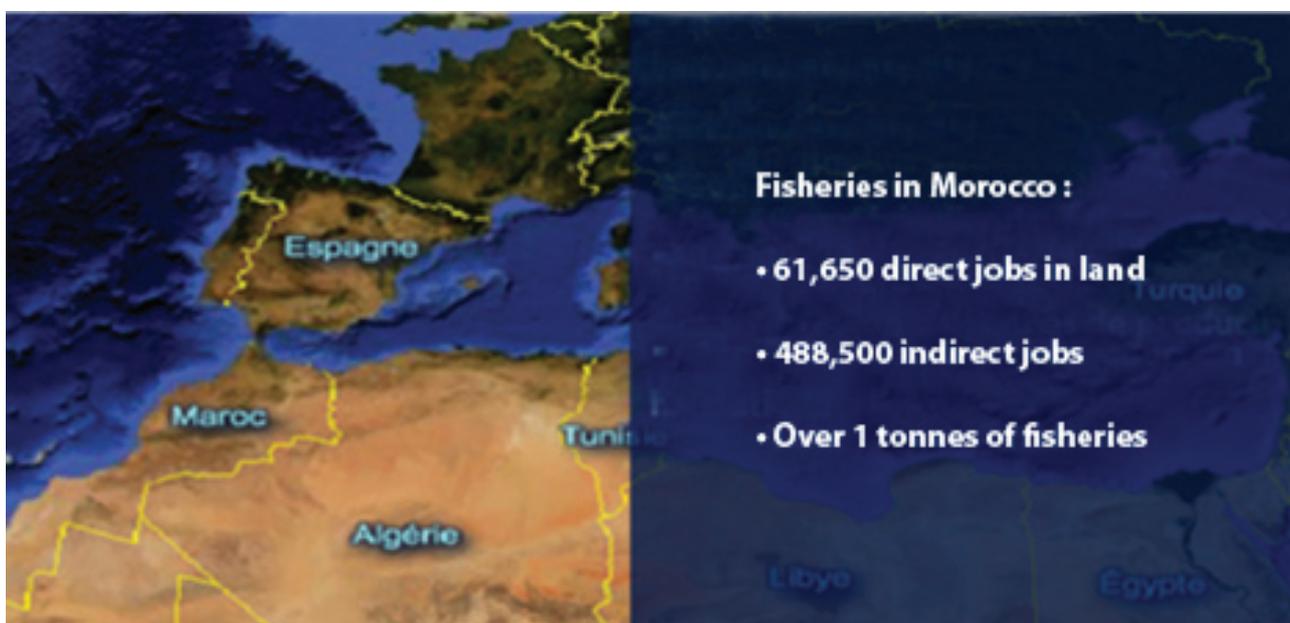
A few examples enable measuring the progress made in this field by the Kingdom of Morocco, notably in the last twenty years:

- Ratification of the majority of international conventions and integrating their content into the national set of rules, including
- The Convention on Biological Diversity;
- The Convention on the Conservation of Migratory Species of Wild Animals;
- The Convention on International Trade in Endangered Species of Wild Flora and Fauna and Flora
- Implementing the national strategy on protected and humid areas, defining the guidelines in terms of classification and managing Sites of Biological and Ecological importance (SIBE);

- Establishment / Strengthening of specific regulations relating to various human activities: Deep sea, coastal & traditional fishing, harbor activities, urban development, leisure & tourism, etc..

Located in the northwestern edge of Africa, with a coastline of 3,500 kilometers, bordering the strategic Strait of Gibraltar and benefiting from very favourable hydro climate conditions, Morocco's maritime tradition is naturally strong:

- A 3,500 kilometer-long coastline with 3,000 km on the Atlantic Ocean and 500 km on the Mediterranean Sea
- Very favourable hydroclimatic conditions
- Large and diverse fishery potential (~ 1.6 MT of fisheries products per Year)
- Fisheries sector generate 8.3% of GDP;



Morocco has very important fisheries asset that makes of it leading country in this field.

The sector has long benefited from substantial investments by the public (ports) and private (fishing fleets, processing industries) sectors.

It contributes significantly to the national economy (8.3% of GDP) and has long been an engine for exports. Its development potential is currently under-exploited due to structural constraints.

The «Halieutis» strategy aims to make of the maritime fishing sector a real engine for sustainable growth of the national economy.

In this connection, several development policies have been designed for the macro / micro activities, with different size, markets, players and socio-economic impact:

- Halieutis strategy
- PNAL : National coastal management programme
- IRA : Immersion of artificial reefs

Le Morocco has opted for a responsible and sustainable exploitation of its fishery resources as well as an economic development that takes into consideration the local people living directly or indirectly from the sea. The results of its actions are mirrored in social achievements and the setting of goals that correspond to its maritime potential.

Concerning the preservation of its marine ecosystems, which is a trans-border issue par excellence, Morocco has encouraged all forms of national bilateral or multilateral actions. The Kingdom has a well-established expertise in such field as (immersion of artificial reefs, fishing villages, developed landing points...). Fisheries are one of Morocco's main exports to the African continent.

Moreover, the management of the maritime public domain (DPM) is an integral part of the protection and preservation strategy whose implementation was embodied by several actions, including:

- Demarcating the maritime public domain (DPM). Currently 43% of Moroccan DPM was definitely delimited, 53% is in the administrative phase and 4% in technical phase.
- DPM police to prevent encroachment and ensure compliance with the specifications in the case of a temporary occupation of DPM.
- Monitoring through aerial photos to enable the

following-up of the evolution of the coastline and assess the quantities of sand illegally exploited in the DPM.

- Surveying of marine sands deposits through the carrying out technical enquiries necessary to localise and assess sandy deposits with a view to finding a solution to sand scarcity and protect beaches and the coast from overexploitation.
- The annual and systematic quality monitoring of swimming water since 1993 with the aim of informing the public and assisting the public and decision makers about the priorities of sewage programmes.

Challenges and prospects

1. The national environment and sustainable development charter

His Majesty King Mohammed VI, called in his Throne speech in 2009 for the elaboration of a “comprehensive **national environment charter** (...) as part of a **sustainable development policy**.”

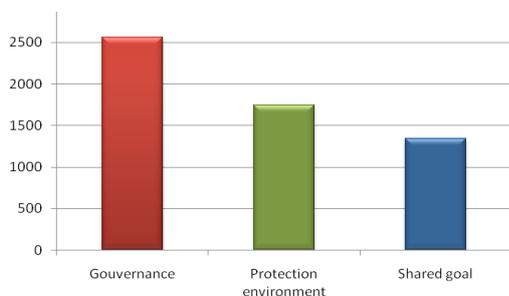
In Morocco's institutional reforms, the national environment and sustainable development charter marked a defining moment that led political action to converge the social, economic and environmental pillars.

The democratic elaboration process of this charter was also fundamental. It laid the foundations for inter-ministerial cooperation on which the implementation of sustainable development can be build.

The charter's consultation process

As part of an exemplary participatory approach, the draft charter was submitted to a consultation process involving players and citizens building on:

- **Regional consultations** : Over 8500 participants took part in the consultation process.
- **Consultations via the internet** : with over 127.000 visits and around 9 000 filled questionnaires.



- **Parallel consultations** : More than 46 parallel events were organized by different entities (departments and public agencies, political organizations and trade unions, professional associations, research institutions, NGOs and the Moroccan community abroad)

The process of consultations resulted in the formulation of 5654 recommendations 5654 which were processed and classified into three main areas: governance, protection of environmental areas, and supporting measures.

The mobilisation of all the parties involved in the project laid the groundwork for making of sustainable development a shared goal.

The Implementation of the charter

In 2010, on the occasion of the Throne Day, His Majesty King Mohammed VI urged the government to act upon the major guidelines which stemmed from the broad debate that was initiated for the purpose of devising a national charter for the protection of the environment and for sustainable development which was prepared as part of a comprehensive action plan with well-defined, concrete targets in all fields of activity. In this respect, His Majesty called on the government to formally shape this plan into a draft law which will serve as a reference for future public policies in this field.

The regulatory operationalisation is governed by a Framework Law to be submitted to Parliament's approval during the year 2012.

To implement the national environment and sustainable development charter , an environment sustainable protection system (SPDE) was adopted as a steering and management tool. It aims to embody the principles and values of the charter, through gradual strategic planning which consists in:

- Upgrading the environment: to comprehend the environment one-dimensionally through thematic approaches to environmental materialised in programmes with a curative primary goal.
- Devising a national strategy for the environment (SNE), which makes of the environment a multidimensional pillar through a strategic approach deployed in all areas and with a preventive and curative mission.
- Define and implement a national strategy for sustainable development (SNDD) that allow the integration of additional dimensions related territories and socio-economic and socio-cultural contexts, which are typical elements of sustainable development.

The Charter and its implementation process were adopted in February 2011 during the seventh session of the national environment council, an advisory body.

2. Morocco's green economy: how transition is taking place?

Implementing green growth is a global sustainable development issue that was listed among the themes of the Rio+20 conference. The United Nations Environment Programme (UNEP) defines a green economy as "one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In its simplest expression, a green economy can be thought of as one which is low carbon, resource efficient and socially inclusive".

Green economy is the adoption of new organisational models, new lifestyles, but also new modes of production and consumption that tend to conserve natural resources and bring together the three pillars of sustainable development.

In Morocco, the national context can be considered conducive to the establishment of a green economy in view of the importance of the initiatives launched so far in various economic sectors and particularly in the

mobilisation strategy of water resources, environment and forests preservation, the development of renewable energies and energy efficiency, strengthening the purification and treatment of wastewater, improving solid waste management and sustainable tourism.

These initiatives will help meet the pressing socio-economic and environmental needs. The transition to green economy also requires integrating environmental considerations into all existing economic sectors and creating new industry sectors covering the new green industries. Developing funding (private and public) dedicated to the green economy, anticipating and monitoring competences and creating national centers for expertise, research and innovation in the new green jobs are all key to ensure the success of green transition and necessarily requires a strong commitment by the state and the private sector within the framework of a long-term development vision .

A report conducted by the ministry of energy, mines, water and environment in February 2012 dubbed «Mobilisation for green growth in Morocco» identifies the development potential of green industries. This document analyses the new industries linked to green technologies and services, which can be grouped into three categories:

- Sectors that are committed to energy saving
- Sectors that contribute to the preservation of natural resources
- The sectors that contribute to reducing emissions of greenhouse gases.

Sector-oriented strategies launched since 2007 and which have been converging on a green economy provide employment opportunities set at:

- Renewable energies : 13,300 jobs by 2020
- Energy efficiency : 36,800 jobs by 2020
- Forests: 50,000 jobs by 2020
- Sewage: 10,000 jobs by 2030
- Waste: over 11,000 jobs by 2020.

What measures to support Morocco's transition to green economy?

In the context of preparations for Rio + 20 in Morocco, the Economic and Social Council has also contributed to the identification of potential sectors and supporting measures. The Council has notably made several recommendations to support the development of national green economy industries:

- Developing a comprehensive development strategy for the green economy in Morocco;
- Developing industrial clusters that are related to green economy;
- Developing a strategy for anticipating needs relating to competences and developing innovation capabilities;
- Strengthening governance mechanisms of the green economy strategy at the national and regional levels;
- Developing education and awareness raising about the environment;
- Setting up financial mechanisms earmarked to developing green economy;
- Operationalising the existing environmental legal arsenal through the setting up of control and follow-up mechanisms;
- Developing the environmental dimension and societal behaviour.

This transition to the economy should be in line with strengthening the social pillar of sustainable development. Health, education and the fight against poverty and exclusion were a priority level of social action during the last two decades. 20% of public spending are now allocated to basic social services. However, the State-led actions are not enough. A turning point was made in 2005 with the launch of the national initiative for human development (INDH) which strongly integrated the civil society. Thanks to this large scale anti-poverty programme and beyond the statistical report, a momentum was created and reinforced for 5 years opening interesting development prospects.

Moreover, Morocco's ministry of housing, urban planning and city policy has been leading the focus group on green growth and territorial development as part of the

MENA/OECD initiative which falls with the framework of the implementation of the Marrakech Declaration on Governance and Investment, adopted in November 2009 at the end of the MENA OECD initiative on Governance 2011-2015.

3. Green growth and the eradication of poverty : Morocco's vision

In its report, "Towards a Green Economy: Pathways to Sustainable Development and Poverty" (2011), the

UNEP deemed that investing 2% of global GDP in ten key sectors would pave the way for the transition to a green economy. This investment, estimated at about an average of 1300 billion dollars per year, could enable the world to experience a growth rate roughly equal, if not superior, to the predictions of economic models in force.

The international benchmark shows that the green economy concept has a potential for sustainable growth and job creation that is much more important than the conventional model. States involved in this new model have developed a coherent and integrated national strategy into all economic and social sectors. The green economy has been used in some cases as a means of harmonizing sector-oriented policies enabling economic effectiveness in the regions. These strategies were based on a strong regulatory framework with efficient arrangements for monitoring an appropriate environmental and energy taxation.

A new approach to economic growth is necessary to achieve social welfare and economic prosperity. Morocco should find the means to integrate environmental sustainability to economic growth and social progress by disconnecting growth from the overexploitation of the environment and social inequalities.

By focusing the analysis on two key resources (water and energy) strategic cluster (waste):

- Investment and the deployed efforts allow for ensuring the fundamentals
- The inaction will cause the degradation of the socio-economic situation and exacerbate poverty in the Kingdom.

The oil prices are following an increasing trend coupled with Morocco's growth prospects and therefore, mechanically, an increase of energy needs. This has caused, in return, Morocco to pay higher energy bills. The country faces an additional challenge: energy dependency. Indeed, with imports of 98% of its energy, the annual bill amounted to 11% of GDP in 2011. The national energy strategy aims to develop energy efficiency and renewable energy.

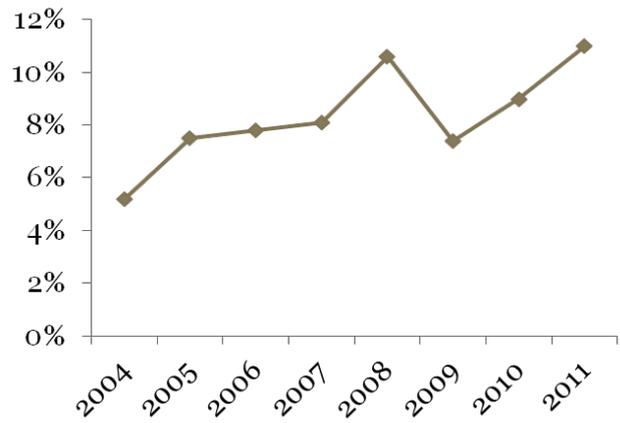


Figure 27 : the percentage of energy costs of GDP

The national energy strategy

Main Goals	Strategic goals
<ul style="list-style-type: none"> • Securing supply and energy availability • Generalise access to energy with affordable prices • Maintaining demand • Preserving the environment 	<ul style="list-style-type: none"> • A diversified and optimised mix structured around reliable technological competitive choice • Mobilising national resource through promoting renewable energies • Giving energy efficiency status of national priority • Regional integration

The solar plan

The national energy strategy aims to bring the share of renewable energies of total electricity capacity will reach 42% by 2020. Morocco's solar plan will enable the production 4500 GWh per year, the saving of 1 Million tonnes and avoiding the emission of 3.7 billion tonnes of CO2 per year.

Installed capacity	2 000 MW
Electric production	4 500 GWh
Investment	9 billion \$
Avoided CO2 emission	3.5 Million tonnes / year
Annual saving	1 Million TEP ~ 500 Million \$

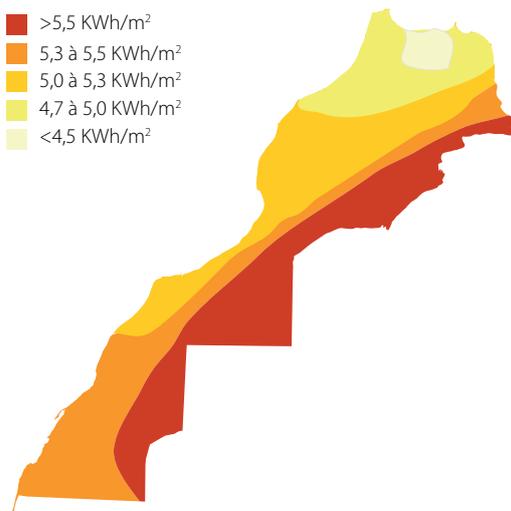


Figure 28 : Map of solar potential



The wind plan

The integrated wind programme will secure 6600 GWh/year and will enable saving 1.5 million tonnes and the avoidance of 5.6 million tonnes of CO2 emissions annually.

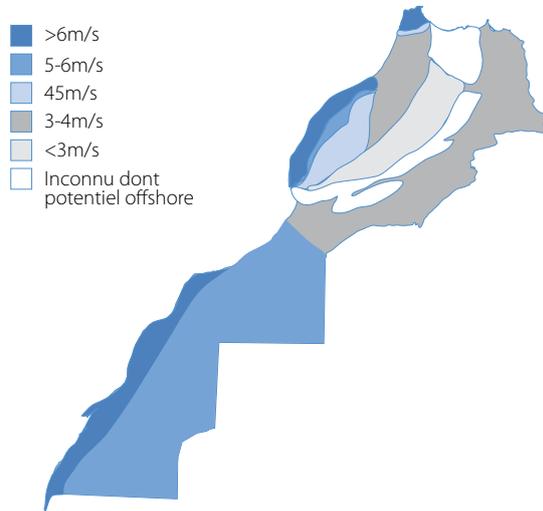


Figure 29 : wind potential

Installed capacity	2 000 MW
Electric production	6 600 GWh
investment	3,5 billion \$
Avoided CO2 emissions	5,6 Million tonnes/ year
Annual saving	1,5 Million tonnes ~ 750 Millions \$

In order to reap all the benefits of the national energy strategy on renewable energy, the development potential of new industrial activities as well as the socioeconomic and human development through job creation, a set of 10 operational measures structured around six components is proposed as follows:

- Reinforcing the national strategy to develop renewable energies
- Developing and structuring the value chain for a sustainable and strong industrial integration
- Strengthening the existing financial and tax system relating to renewable energies
- Making effective the new modalities defined by Law 13.09 and developing normalisation
- Reinforcing the impact monitoring, implementation, follow up and assessment mechanisms

Set up a plan for training and research and development to support the launched initiatives and ensure a better anticipation of renewable energies.

The targeted results:

- Reducing the energy bill from 750 million dollars per year through wind energy and by 500 million per year through solar energy
- Creating 38000 jobs
- Reducing greenhouse gas emissions by 9.1 million tonnes per year
- Mastering and exporting technologies



Water

Issues	Impact
<p>Rising demand and deficit</p> <p>The 2012 water needs will stand at 13.7 billion m³ while the deficit will reach 2 billion m³</p> <p>The 2030 water needs are estimated at 16.7 billion m³ with a deficit of 5 billion m³</p>	<ul style="list-style-type: none"> • Economic sector in difficulty • Loss of jobs • Exodus from affected regions • Desertification •

Action plan: Developing water resources by 2030

1. Water saving (2.5 billion m³)
 - Irrigation (2 billion)
 - Water supply network (0,5 billion)
2. Water mobilisation (2.5 billion m³)
 - Rainwater capture
 - Non-conventional water (desalination, reuse)
 - dams.

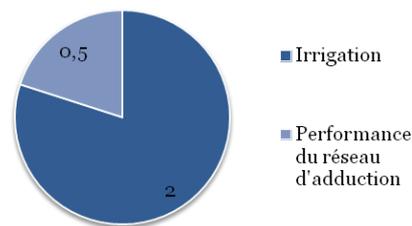


Figure 31: water saving by m³

Sought results

- Mobilisation of new resources related to the economy (as part of the programs to eradicate poverty)
- Supporting economic activity
- Developing new branches such as desalination, sewage in order to create jobs
- Protecting the environment, natural resources and health of the population (National sewage Programme).

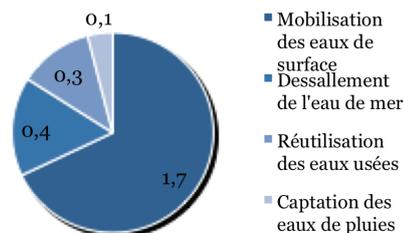


Figure 30 : mobilisation of additional resources

Waste Management

	Action plan	Goals
waste	<ol style="list-style-type: none"> 1. Achieve a collection rate of 90% by 2015 and 100% by 2020 2. Conduct sanitary landfills benefiting all urban centers (100%) in 2015. 3. Developing the sector of «sorting-recycling-reuse» by achieving a 20% recycling rate in 2015. 	<ul style="list-style-type: none"> • Improving the population's health • Protecting environments and natural resources • Creating between 12000 and 18000 jobs per year • Mastering and exporting expertise and know-how

Investments and efforts required in these areas are important, Morocco needs support in terms of funding, technology transfer and training to achieve the goals which are necessary for eradicating poverty maintaining development.

In preparation for RIO+20, and the debates on green growth and the mechanisms of its implementation, Morocco has conducted an domestic assessment (strengths & weaknesses) to carry out green growth. The Kingdom also tried to provide a reading of external factors that might encourage or disrupt this implementation (opportunities & threats)

In order to achieve transition to green economy and benefit from an international support, Morocco has the assets in its favour and offers several opportunities:

- Strategic geographical location : hub between Africa and Europe
- Renewable energies potential
- Status of low CO₂ emitter (2.5 tonnes per capita per year in 2004): This enabled Morocco to benefit from

the carbon credit market

- Sector-oriented approaches that gave long-term visibility
- Clearly defined strategies in future sectors (wind and solar energy, waste, sewage)
- Mitigation potential of 53 million tonnes of CO₂-eq in 2030
- Operationalisation of the green funds (100 billion \$ per year as of 2020)

Areas of concern are :

National :

- Adequacy of training in relation to needs.
- Lack of environmental taxation and accounting.

International :

- New trade barriers such as the EU carbon tax on air.
- New protectionism forms .
- New conditionality for development assistance.

Conclusion

In the lead-up to the Rio+20 Conference, developed countries must resolve the systemic crises they are facing and also live up to the responsibility they accepted at the 1992 Earth Summit in Rio to correct and repair the harm caused by growth models that pay little heed to the conservation of the planet.

Developing countries understand the importance of building a future based on sustainable growth models that preserve natural resources. They also believe that setting up a green and equitable economy will provide development opportunities.

We have highlighted Morocco's progress and accomplishments in terms of sustainable development since the 1992 summit through the four «pillars» of governance, society, the economy and the environment. This new growth model illustrates the advances in public policy since the 1990s in dealing with pressing economic, social, environmental and institutional issues. These matters have been progressively consolidated into a social project framed by His Majesty King Mohammed VI, institutionalised in the new constitution and rolled out across Morocco's government, civil society and private sector.

Morocco has taken abundant sustainable development initiatives, which it is striving to develop into a strategic growth priority. However, the cost of this policy is undeniably a considerable burden for a country facing the twin challenges of economic development and the provision of basic services (education, healthcare, fight against poverty) for a population that is growing by 400,000 each year. However, inaction would be substantially costlier, as is demonstrated by the Stern report on the economics of climate change and the Sukhdev report on the economics of ecosystems and biodiversity which show how much an excessive deterioration of ecosystem services would cost the economy as a whole.

The Sukhdev report also puts forward a new instrument for measuring ecosystemic costs, concluding that inaction could cost 7% of global GDP by 2050.

Promoting sustainable development requires a global vision of both the country and its technical resources, not to mention the individual and collective support of the population as a whole, which is why sustainable development initiatives are ineffective in the absence of appropriate governance models. This is why Morocco has ushered in a new institutional framework which puts our country on a virtuous path to a green and sustainable economy.

The National Charter for the Environment and Sustainable Development, which was born of a national consensus, gives strong support to this convergence and coordination, backed by a framework law drawing on the Kingdom's entire legal arsenal. The Charter will also be rolled out on a technical level through a National Sustainable Development Strategy.

But a great many complex challenges still remain:

- In respect of governance, advanced regionalisation – namely additional responsibilities given to the regions – must be translated in operational terms by the transfer of human as well as technical skills, sufficient financial resources to focus on local issues, and possibly even putting local Agenda 21 action plans back in the spotlight.
- At the social level, sustainable development can prevent violent crises and hard-hitting recessions. Moreover, efforts in the fight against poverty, illiteracy and gender inequality must be kept up to achieve the Millennium Development Goals. Another crucial challenge is to support young people by offering training, especially for new green jobs.
- At the environmental level, the systematic consideration of negative externalities in the implementation of policies, strategies and programmes, the development of environmental accounting and green taxation systems as well as the systematic integration of climate change into public policy are short-term issues which could have far-reaching, long-term impacts.

These challenges will require substantial financial investment sourced through innovative fiscal mechanisms that remain to be set up.

Morocco, which has suffered the full brunt of the impact of climate change, cannot bear these additional costs alone, and accordingly stresses the need for collective action, founded on the principle of shared but differentiated responsibility. This explains our attachment to international cooperation, which, beyond financial crises and upheavals across the continent, is the assurance of civil peace and international cooperation, in the spirit of Principle 5 of the Rio Declaration:

“All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.”



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Young Reporters
for the environment

Recommendations from the Forum of the Young Reporters on : « EDUCATION AND AWARENESS FOR RESPONSIBLE CONSUMPTION » April 28 – 2012 Rabat

In the margins of the celebration of 10 years of the program “Young reporters for the environment” and as part of the preparations in Rio+20, a participatory forum was organized linked to the thematic of the Education and Awareness for Responsible Consumption.

This meeting which brought together the winners of the program Young environmental reporters, professors, media representatives, civil society representatives, professional associations from both the public and private sector, led to the following recommendations:

Thème 1: Educating youth about the environment and sustainable development

- Enact legal framework for the implementation of the National Charter for the Environment and Sustainable Development;
- Promote environmental education and sustainable development in an integrated manner, from primary to secondary school, through their integration in school curricula;
- Develop youth training programs for teachers, educators and the press and encourage education by coaching about the environment and sustainable development, and improve educational tools to be more dynamic;
- Strengthen and generalize the establishment of environmental clubs and environmental journalism clubs in schools, expand the participation of different stakeholders, and support these programs by providing all the necessary tools in line with the specific programs and projects for the implementation of environmental education;
- Create networks of local, regional and national environmental clubs and young reporters, as well as networks of associations working in the field of environment. Strengthen coordination among themselves to support environmental activities in schools, with support from effective partnerships;
- Create databases of reports by Young Reporters for the Environment in digital and in hard copy form, to be used by young reporters at the national level and by the various stakeholders.

Thème 2: Selecting sustainable production and consumption methods: issues and challenges

- Integrate the green economy in the educational curriculum and training and scientific research programs;
- Encourage the rational use of fertilizers and chemicals in agriculture;
- Encourage traditional production methods that protect the environment;
- Reduce the use of packaging and encourage recycling;
- Create financial incentives for developing a green economy;
- Encourage the use of equipment that uses less natural resources and energy;
- Encourage citizens to take account of environmental protection criteria in the selection of consumer products;
- Establish a national day on responsible consumption;
- Develop a sustainable urban public transportation system and encourage its use.

Thème 3: Communication and awareness - raising for a responsible consumption

- Have the right to access environmental information in order to facilitate the role of the press in raising environmental awareness;
- Give adequate importance to environmental issues in the national press by creating a station specializing in the environment or by creating editorial space and audiovisual programs to communicate and educate on the environment in a sustainable way;
- Build capacity of local and regional press (under the proximity policy), as well as production organizations, advertising agencies, and event management to improve communication on the challenges and opportunities of adopting sustainable methods of production and consumption;
- Encourage communication professionals about the need to integrate environmental considerations into their publications;
- Adapt the discourse on environmental protection by linking it to various economic, social and cultural issues;
- Organize large-scale events on environmentally oriented audiovisual and film (e.g. international festivals);
- Create a network of Young Reporters for the Environment and the press working in the environmental field.

