



# **Climate Change Financing and Aid Effectiveness**

## **Morocco Case Study**

**Final Report**

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## Acronyms

ADEREE	Agence nationale pour le Développement des Energies Renouvelables et de l'Efficacité Energétique
AfDB	African Development Bank
AFD	Agence Française de Développement
AGF	Africa Green Fund
CDDE	Capacity Development for Development Effectiveness Facility
CDM	Clean Development Mechanism
CER	Certified Emissions Reductions
CIF	Climate Investment Funds
CGEM	Confédération Générale des Entreprises du Maroc
CMPP	Centre Marocain de Production Propre
COP	Conference of the Parties
CSO	Civil Society Organisation
CTF	Clean Technology Fund
DAC	Development Assistance Committee (of the OECD)
DPL	Development Policy Lending
EIB	European Investment Bank
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIZ	Gesellschaft für Internationale Zusammenarbeit (Germany)
GoM	Government of Morocco
IDB	Islamic Development Bank
IPCC	Intergovernmental Panel on Climate Change
KfW	Originally Kreditanstalt für Wiederaufbau, now KfW (Germany)
MASEN	Moroccan Agency for Solar Energy
MDG	Millennium Development Goal
MENA	Middle East and North Africa
MTEF	Medium Term Expenditure Framework
NGO	Non-governmental Organisation
oda	Overseas Development Assistance
OECD	Organisation for Economic Cooperation and Development
ONE	Office National de l'Electricité
PFM	Public Financial Management
REDD	Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
SME	Small and Medium Enterprise
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

## Executive Summary

### *This work*

This report is one of a series of brief country studies that have been commissioned by the African Development Bank (AfDB) and the OECD/DAC as part of a regional study on climate change finance and aid effectiveness<sup>1</sup>. It is part of a global programme being undertaken by CDDE, OECD and UNDP, with CDDE leading in Asia and the Pacific and the OECD in Africa. The work seeks to strengthen the management of funding for climate change using Paris Declaration Aid Effectiveness principles. It provides a rapid assessment of Morocco's existing and prospective mechanisms for climate change financing in the light of such principles.

The analysis is based upon a review of literature and data on Morocco, supported by stakeholder interviews with government officials, donors, civil society and agencies representing and working with the private sector. This was a rapid exercise, and is not a comprehensive study. The African country assessments will be brought together into a synthesis report and discussed in a workshop later in 2011. The timing of this study will also allow it to feed into discussions about the design of the new Green Climate Fund and Africa Green Fund.

This Morocco study raises important questions particularly about government ownership of the policy agenda and the role of donors in middle income countries, the interface with the private sector and appropriate instruments to support renewable energy, particularly solar. Morocco is a middle income North African country, with substantial public and private sector capacity. As such, it raises different challenges from those of many Sub-Saharan countries. There is also a very different pattern of donors, with significant non-DAC representation. Central to effectiveness on the ground is the need for World Bank and AfDB to work closely together.

### *Background*

Morocco has experienced macroeconomic stability and steady economic growth, averaging 5% since 2001. Morocco has an open trading regime and strong export performance. Progress against the MDGs has been very positive, but unemployment remains above 9% and Morocco is ranked 114 out of 169 in the 2010 Human Development Index.

The major impacts of climate change in Morocco will be higher temperatures, with marked regional variations, reduced rainfall and an increase in the severity of extreme weather events. Morocco is highly vulnerable to the impact of climate change, particularly with regard to its water resources, and in coastal and desert regions. Morocco is already benefitting from external climate change finance from bilateral donors and global climate funds, particularly the Clean Technology Fund for solar and wind generation of electricity. There is considerable potential for funding to be scaled up given the likely impact of climate change and adaptation needs.

### *The Role of Government*

Morocco has given high priority to climate change. Morocco ratified the United Nations Framework Convention on Climate Change in 1995 and the Kyoto Protocol in 2002, and submitted its Second National Communication in April 2010. It has developed a national plan

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<sup>1</sup> The others are Cameroon, Ghana, Kenya, South Africa and Tanzania.

for climate change which focuses on developing renewable sources of electricity generation, particularly solar, and investing heavily in energy efficiency. A range of well-developed sectoral strategies, including the “Plan Vert” for agriculture, are complementary to this, but plans for adaptation are less well developed than those for mitigation. The Government does not identify climate change as a category within national budgets. Morocco is committed to the 2005 Paris Declaration on Aid Effectiveness and participated in the second follow-up survey in 2008. This demonstrated weaknesses in donor harmonisation. Morocco is increasing donor alignment with national priorities through the establishment of steering committees in key sectors.

### *The Role of Donors*

The level of concessional development assistance to Morocco is relatively low, at 1% of GDP, reflecting its middle income status. The biggest donors are the European Commission and France with substantial loan resources from the African Development Bank, World Bank and European Investment Bank. External finance for climate change is provided both bilaterally and through global funding mechanisms, and is delivered as grants, loans, and technical assistance to projects and government departments. The major instruments are the Clean Technology Fund and GEF. Morocco has not received any support from the Adaptation Fund or REDD. There is no formal commitment from donors to align their climate change support behind government priorities, although individual donors are seeking to do so, on a case by case basis.

The capacity of Government is higher, and the role of donors is less, than in many of the other countries in the study. Donor co-ordination takes place through Government-led sectoral groups, but there is no specific group for climate change. Donors are generally aligned with national priorities, but direct support to NGOs tends to fall outside the existing structure. There is some criticism of donor systems as being inflexible and slow. Defining and identifying aid for climate change is very hard. Climate change and environment are not discrete budget sectors and so climate change is an element in a huge range of interventions.

### *The Nature of Climate Change Financing*

Morocco is a global leader in renewables. Funding is still relatively small and has come from a range of bilateral and multilateral partners. Morocco has begun to access climate change financing for mitigation activities, notably CTF funding for solar and wind power, but the country will need to scale up its response massively if it is to fully address the challenge of adaptation. Decisions on the allocation basis for the Green Climate Fund will be highly significant for Morocco.

### *Conclusions*

Morocco has demonstrated political leadership on climate change, but needs greater capacity to develop and manage programmes. It is giving high priority to renewables which will require substantial external support. Adaptation needs are likely to be huge and are only beginning to be addressed. There is scope for a stronger role for the private sector and civil society.

Against the five Paris Declaration criteria, performance is strong on ownership, and progress is being made on alignment and accountability. There is room for improvement on harmonisation and results.

## 1. Introduction

Climate change financing has emerged in response to the need for ‘adequate, predictable and sustainable’<sup>2</sup> financing to address climate related issues, particularly in developing countries<sup>3</sup>. Since 2002 more than 20 global funds have been established, with donor partners pledging around US \$30 billion at the Copenhagen Conferences of Parties (COP) 15 for 2011-2013 as a Fast Start programme, and US\$ 100 billion annually by 2020 as long-term finance. Following the Cancun COP in 2010, work is underway for the design of the Green Climate Fund, which will be further considered at COP 17 in Durban COP at the end of 2011.

This report on Morocco is one of six country level studies in Africa commissioned by the OECD/DAC and African Development Bank (AfDB) (the other five are Kenya, Tanzania, Cameroon, South Africa and Ghana). It is part of a global programme on climate change finance and aid effectiveness being undertaken by CDDE, OECD and UNDP, with CDDE leading in Asia and the Pacific and the OECD in Africa. The work seeks to strengthen the management of funding for climate change using the framework of the internationally agreed Aid Effectiveness principles. This report provides a rapid assessment of Morocco’s existing mechanisms for climate change financing in the light of such principles. Individual country reports have also been brought together into a synthesis report which provides an overview of climate change financing issues across the continent.

There are many lessons to be learnt for climate change financing from the history of external financing for development. This report places climate change financing within the wider development context, and in particular in relation to the Aid Effectiveness principles articulated in the Paris Declaration and the Accra Agenda for Action. In doing so it looks at existing climate change financing mechanisms in Morocco and assesses the extent to which principles of aid effectiveness are being applied under the five main headings of the Paris Declaration: Ownership, Alignment, Harmonisation, Results and Mutual Accountability.

The analysis for this report is based upon a number of stakeholder interviews in country, with follow up in London and Washington, covering government officials, donors, civil society and institutions that work with the private sector. Interviews were further supported by a review of related literature and data available in country and from international sources.

## 2. Country Context

### *What development challenges is Morocco facing?*

Over the past ten years Morocco has given priority to economic and social development in the context of gradual political liberalisation. The country has experienced steady economic growth, averaging 5% since 2001. This has slowed slightly in response to global economic conditions and is estimated at 4% for 2011. Development of infrastructure has been significant. The Government has maintained a high level of macroeconomic stability since 2003. Inflation has been largely under control, rising from 1% in 2010 to an estimated 2% in 2011. Morocco is ranked 114 out of 169 in the 2010 Human Development Index with a score of 0.567.

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<sup>2</sup> UNFCCC 2007, Bali Action Plan

<sup>3</sup> OECD 2009, Climate Change and Development: Key Principles to Inform Climate Change Financing

Morocco has good access to European markets and has been in a Free Trade Agreement with the USA since 2006. It is the world's largest exporter of phosphate, and other key foreign currency earners include tourism, remittances, agriculture and light industry. Morocco has made significant progress in improving social indicators over the past few years. Progress against the MDGs is generally positive as indicated below.

### **Achievement of the Millennium Development Goals in Morocco**

Morocco has made significant progress against a wide range of the MDG indicators:

#### **MDG 1: Eradicate extreme poverty and hunger**

Absolute poverty, measured by the international poverty line, decreased significantly from 6.3% in 2001 to 2.5% in 2007.

#### **MDG 2: Achieve universal primary education:**

Primary school net enrolment rose from 70.6% in 1999 to 89.9% in 2008.

#### **MDG 3: Promote gender equality and empower women**

The enrolment of girls into primary school education has remained below that of boys, but the gender parity index has risen from 0.81 in 1999 to 0.91 in 2008.

#### **MDG 4: Reduce child mortality**

Under-five mortality has fallen from 57.4 deaths per 1,000 live births in 1999 to 37.5 in 2009.

#### **MDG 5: Improve maternal health**

Maternal mortality rates have fallen from 160 deaths per 100,000 live births in 2000 to 110 deaths per 100,000 live births in 2008.

#### **MDG 6: Combat HIV/AIDS, malaria and other diseases**

The proportion of people living with HIV/AIDS is extremely low at 0.1%, although deaths from AIDS have increased over the past decade. The mid-point estimate for TB prevalence has reduced from 100 per 100,000 in 1998 to 48 in 2008.

#### **MDG 7: Ensure environmental sustainability**

Progress here has been more mixed. Carbon dioxide emissions rose from 33.9 million tonnes in 2000 to 46.4 million tonnes in 2007. The equivalent per capita figures rose from 1.18 tonnes to 1.49 tonnes. Access to improved water and sanitation facilities has increased.

#### **MDG 8: Develop a global partnership for development**

As part of commitments made by Morocco under the Paris Declaration, the Ministry of Economy and Finance in partnership with UNDP and with financial support from Spain and France, has since 2008 been implementing a project aimed at mapping development projects through a geographic information system. This project is in the form of a database providing integrated information on development projects, and will in the medium term provide access to all partners to comprehensive and reliable data on developmental projects in Morocco, giving greater visibility to aid granted to the Kingdom.

*Source: UN Statistics March 2011*

Significant challenges remain, however. The budget is under increasing pressure and despite private sector growth, unemployment remains above 9%. Population growth has fallen but remains at 1.2%. Poverty is focused in rural areas with an estimated 2% of the population living

in absolute poverty. Economic prospects for marginalised communities will be further threatened by climate change.

*What climate change is Morocco experiencing?*

Morocco's weather is determined by the interaction of two major climatic systems. Over the past 30 years (1976-2006) rainfall has become more erratic and has demonstrated an aggregate fall ranging between 3% and 30% in different regions. The seasonal pattern has also changed with increased precipitation in October and November and substantial falls for the remainder of the year. The length of dry periods (defined by less than 1mm of rain per day) has increased particularly towards the end of the rainy season. Between 1960 and 2000 mean temperature has risen by 1.4 degrees C in the south east and more than two-thirds of the country has experienced a temperature rise of at least 1 degree C<sup>4</sup>.

*What will be the expected future change?*

Consistent with global warming trends, predictions by Morocco's National Meteorological Directorate show rising temperatures, less precipitation, and an increase in drought, widening the gap between water demand and supply. Average temperatures are expected to rise between 2 and 5°C by the end of this century, while rainfall is predicted to decline by 20 to 30%. Morocco's coast, especially the rural northeast, including Nador and Berkane provinces, is increasingly vulnerable to the effects of climate change, including sea level rise, storm surges, destruction of wetlands and coastal flooding. Some areas of the north coast are already eroding at a rate of 1 metre per year and the average global sea level rise predicted by the IPCC (up to 59 cm by 2100) will exacerbate erosion. Poverty limits the ability of local residents to cope with these changes<sup>5</sup>.

*What Social and Economic Impacts of Climate Change can we expect?*

Morocco's population has more than tripled over the past 50 years, putting the country's natural resources under pressure. Economic activity is strongly concentrated along the coast. Sea level rise threatens specific estuaries and lagoons, and creates a threat to tourist revenues and low lying agricultural land. Morocco has some particularly vulnerable ecosystems including the oases of the south. Some regions are vulnerable to desertification. It is expected that droughts and floods associated with changing weather patterns will have negative impact on both agricultural and industrial production. There are no overall quantitative estimates of these effects. Fisheries are a major industry for which the impact of climate change is expected to be significant, but is not clear.

Adaptation needs will be huge in Morocco, and are only just beginning to be costed. There is need for further support in more detailed project development where specialist local capacity in legal, financial and engineering aspects of project design and implementation is often weak. Priorities will include coastland, desertification and oasis projects, and addressing increasing

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<sup>4</sup> Source: Second National Communication

<sup>5</sup> Source: Adaptation Learning Mechanism ([www.adaptationlearning.net](http://www.adaptationlearning.net))

droughts and flooding. One example is the work undertaken on the impact of climate change on coastal cities outlined below.

### **The vulnerability of Morocco's Coastal cities to Climate Change**

Over 80% of Morocco's urban population lives in coastal zones. The west coast includes the major cities of Rabat and Casablanca. The World Bank undertook a regional study in 2009/10 that included a separate report on Rabat and Casablanca. This report looked at data since 1961 and estimates that temperature rises are occurring in the two cities at 0.2-0.3 degrees Centigrade per decade and that rainfall is decreasing by 2.8mm per year. These trends are expected to continue and alongside these patterns of reduced rainfall and increased days of drought, the cities will face sea level rises of 0.1m by 2030, 0.17 m by 2050 and potentially much higher levels over the next 50 years (IPCC estimates). Casablanca has already suffered from urban flooding and both cities are vulnerable to storm surges. 40 to 50km of coast around Casablanca is estimated to be at risk from erosion. The World Bank report identifies urban flooding as the highest economic risk to the two cities from weather related events.

With rapidly expanding urban populations (Casablanca grew by half a million people to 3.5 million in the decade to 2004), and reduced run-off, water supply will become an increasing problem for many Mediterranean cities, but current facilities in Casablanca and Rabat are viewed to be adequate. Ambient temperatures will rise and urban air pollution will increase. Rising demand for air conditioning will increase electricity use. The cities also face the ongoing risk of earthquakes and tsunamis.

The costs of these climate-related events are estimated at Dirhams 1.162 billion (\$150 million) in 2030 or about 222 Dirham (\$29) per person per year of which over 90% results from flooding.

*Source: Adapting to Climate Change and preparing for natural disasters in the coastal cities of North Africa: Morocco Report: Egis BCEOM International, December 2010; Scoping paper Anthony G. Bigio, World Bank, June 2009*

The World Bank and FAO undertook a study in 2008 to estimate the impact of climate change on agriculture production. For the period up to 2030, the study concluded that reduced rainfall and higher temperature will lead to gradually increasing aridity. It argues, however, that crop yields can be sustained, based on a shift from rain-fed to irrigated agriculture, with new input technologies and measures taken to ensure sustainable land use. Crop yields are expected to reduce, however, after 2030. Export industries have been increasingly affected by the flooding of industrial areas particularly in Tangiers. The total costs of addressing the impacts of climate change in Morocco, taking into account both immediate and future needs, have yet to be estimated.

### *What is the context for making the most of external finance in Morocco?*

As a middle income country, Morocco's public resources are largely internally generated and donors have a much less prominent role than in low income countries. Morocco benefits substantially from European support through the Neighbourhood programme. It received \$911 million of ODA from all donors in 2009, of which the European Commission provided \$282 million, and France provided \$238 million (Source: OECD/DAC). This is equivalent to 1.0% of GDP and 3.6% of government spending. Substantial loan resources were also provided by the African Development Bank, World Bank and European Investment Bank. GEF projects in the same year totalled \$4.7 million. Morocco has a five year compact with the Millennium Challenge Corporation worth \$698 million, which is mainly targeted at support to the private sector. The most important current funds for climate change work in Morocco are the CTF and GEF, complemented by bilateral and multilateral programmes.

Over the past 10 years Morocco has been developing a more strategic approach to both macroeconomic management and the environment. A national development strategy has focused on competitiveness in traditional sectors (including agriculture, tourism and fisheries) and development of new export-oriented industries (including vehicles and aeronautical). Results have been impressive, with an average of 5% growth. This in turn has led to a 7% per year rise in the demand for energy, leading to the need to double capacity over ten years. It is expected that a further doubling will be required over the next ten years.

Morocco is unique in the range and depth of its sectoral strategies. These include plans for energy and agriculture (Plan Vert). There is a national strategy for climate change but this is regarded as a cross-cutting issue rather than a sector in its own right. There are significant subsidies, estimated at over \$3 billion, to certain classes of fuel. Butane is highly subsidised and commercial fuel prices are well below European levels. Three pilot programmes for integration and harmonisation have been undertaken in education, health and governance, which are generally regarded as successful. The gaps tend to emerge at the next level down in developing projects for funding.

### **Renewables in Morocco**

Morocco is heavily dependent on imported fossil fuels. National decisions were taken to promote renewables in order to reduce this dependency, help the environment and develop local technology and production capacity. The headline is a commitment to install 2000 MW of solar and 2000 MW of wind by 2020. 400MW of wind turbines are already in place. Solar is expensive, and will require long-term subsidy. It is estimated that the first 150 MW will cost \$1.7bn of which \$850m is capital costs and much of the rest is subsidy over 20 years.

The GoM is committed to funding these subsidies and has established the Moroccan Agency for Solar Energy (MASEN) to implement its solar power programme. MASEN's objectives include generation, domestic industrial development, research and regional development. MASEN is a private company, but with public capital. It is looking to install the first 500MW of capacity by 2015. Sites have been identified, the first of these being at Ouarzazate. A very tight plan is being followed and there has been frustration from MASEN that donors have not been able to support technical assistance requirements for project preparation quickly enough. The counter-argument is that procurement rules require a competitive tender and that lead times of six weeks should be manageable. The process for this provides an important case study as to donor co-ordination. MASEN is now down to four potential suppliers for the first plant, and will make a final decision by December 2011.

Morocco's budget deficit has risen sharply and is estimated at between 4.5 and 5 per cent of GDP for 2011, due to the cost of increased government subsidies and public sector pay rises. This will limit the capacity of the GoM to fund large energy subsidies. Success for the first phase of the solar project has depended critically on external support from the CTF. In the longer term, there is potential for electricity exports at a premium to European markets and a reduction of per unit capital costs over time.

The current provision of climate change projects in Morocco includes the following:

Fund	Projects	Value	Notes
GEF	22 projects have been undertaken including climate change strategy and energy efficiency (not all climate change related)	Annual budget of \$4.5 million	GEF agencies include AfDB, a range of UN organisations and World Bank.

Clean Technology Fund	National Programme focussed on wind power	\$150m	Co-managed by World Bank and AfDB
Clean Technology Fund	Regional Programme focussed on solar power	\$197m out of regional total of \$750 million	Co-managed by World Bank and AfDB

Morocco participated in the 2008 Paris Declaration Survey and is currently participating in the final monitoring survey scheduled for completion by the end of March 2011. The results of the 2008 survey indicate that Morocco was well ahead of the international averages on co-ordination of technical assistance with country programmes (82%) and aid using Government Financial Management and Procurement systems (both about 80%). 90% of bilateral aid was untied and 70% was programme based, once again both above international averages. Morocco is able to select donors for programmes based in their relative strengths. Some of the smaller donors find this frustrating, but it is a good indicator of ownership. Morocco scores poorly, however, on donor harmonisation where co-ordinated donors missions were only 12%, and co-ordinated analytical work was only 25%, of the total - both very low scores by international standards.

The following considers Morocco's current activities in the light of Paris Declaration principles.

### 3. Ownership

The 2008 Paris Declaration Monitoring Survey states that aid is 'most effective when it supports a country owned approach to development'. The Government of Morocco has given a high profile to climate change and has played a prominent role in global processes for addressing climate change. It ratified UNFCCC in December 1995 and attended COP 2 in Geneva in 1996. In 2001 it hosted the strategic COP 7 in Marrakech when the Kyoto Protocol was operationalized. Morocco ratified Kyoto in 2002. The Government of Morocco, with leadership by the King, has given a strong policy lead on climate change. In 2010 Morocco committed to implementing the Copenhagen Accord.

The National Committee for Climate Change was set up in 2001, alongside a National Committee for science and technologies related to Climate Change. Its main role has been to draft the first and second communication to UNFCCC in 2001 and 2009. The national climate change plan was presented at Copenhagen in 2009 alongside the Second National Communication, published in April 2010, which are summarised in the box below. The third communication is planned for 3-4 years' time.

#### **The National Plan and Second National Communication**

In November 2009, the Department of the Environment published Morocco's "National Plan against global warming". This includes summaries of current emissions and projections of climate impacts. It has roughly equal coverage of mitigation and adaptation. It picks up the plans of individual line ministries, but does not present an overall integrated national plan, backed up by the governance and institutional arrangements necessary to make it effective.

The Second National Communication to the UNFCCC is dated April 2010 and, at 218 pages, is a much more detailed document. It gives disaggregated geographical and climatic data for the country,

summarising projections of change. It outlines Morocco's policies on climate change and the institutions that have been put in place to undertake research and project implementation. It notes that even a small number of projects registered under the CDM put Morocco in second place in Africa in this regard. It draws together the proposed sectoral strategies that will impact on climate change and proposes mitigation measures by sector with a particular focus on energy, water and waste treatment.

On adaptation there are detailed projections of climatic trends by region within the country and a list of proposed projects. The communication also includes a detailed mapping of vulnerabilities against sectors. There is an extended discussion of the institutional capacity required to implement these approaches. Capacity development projects are listed and costed at Euro 8 million in the short term up to 2014, Euro 10 million in the medium term and Euro 12 million in the long term (post 2020).

The Communication also includes a range of prioritised projects for mitigation and adaptation, with the former being more developed. Total investment required for mitigation is estimated at \$29.6 billion, of which \$28.0 billion is for energy projects. Annual recurrent costs are estimated at \$1.5 billion. 41 adaptation projects are listed and ranked, but not costed. Substantial additional work will be required to develop these projects to a fundable level.

The National Committee on Climate Change is chaired by the Department for the Environment, who are the national focal point for UNFCCC, and includes nominated contacts for climate change from Ministries across Government. The Committee has no legal basis which raises questions about its authority, ownership and power. Each Ministry tends to guard its own independence and co-ordination through the Committee is weak.

The Government has a range of thematic groups but these do not include climate change. The sectoral strategies for many of these groups have significant implications for climate change mitigation. Morocco's national strategy for energy was published in 2009 and aims to have 15% renewable power generation by 2020. Morocco has been a world leader in developing renewable energy. In January 2010, the law concerning renewable power generation was liberalised to allow anyone to generate power for their own use, although ONE remains a monopsonist buyer for power to the grid. Auto-generators remain very small. The viability of solar depends on public subsidy in the short term and potential exports to markets putting a premium on green energy in the future.

The national energy strategy also targets 12% energy efficiency savings by 2020. ADEREE was established as a new agency under the strategy to co-ordinate this work. The GEF has been closely involved. Morocco has developed a strong energy efficiency programme with an initial focus on construction and industry. Construction is a very dynamic sector and the strategy envisages 200,000 new hotel rooms. GEF and UNDP have been involved in household energy efficiency, and GEF and AfDB in industrial energy efficiency. Audits are planned for 2000 businesses, roughly a quarter of all significant firms. Strategies for transport and agriculture are expected to follow.

A major initiative is under way to promote recycling, energy efficiency and conservation by private citizens. There is evidence of strong public support for environmental initiatives such as the Earth Day. Morocco has potential to develop significant projects under the CDM. High quality projects are worth \$10 per tonne or more and this is expected to rise. It is hoped to have 15m tonnes by 2012 and 30m tonnes by 2020. However, the process of developing projects is very slow and carbon credits cannot be the answer for providing solar subsidies because the sums are not large enough. Incentives are provided to consumers including the 20:20 initiative

in which households achieving a 20% reduction in energy usage benefit from an additional 20% rebate on their bill.

Electricity prices are relatively high for the region which encourages efficiency, but there are significant subsidies (of at least \$3 billion per year) on hydrocarbons including on butane (for domestic heating and cooking), petroleum and diesel. This is not consistent with the overall mitigation strategy. There is strong political commitment for rural electrification where many of the poorest people live. ONE has a clear strategy to use solar for remote locations where the costs of connecting households to the grid are above a specified threshold level.

There is a planned Public Expenditure Review for Climate Change which will be the first of its kind. The hope is that this will increase the strategic nature of Morocco's response, especially from the Finance Ministry, and allow the integration of gender budgeting and other new approaches. The PER will look at risks and opportunities. Medium Term Expenditure Frameworks are popular with line Ministries, but have yet to be adopted by the Ministry of Finance. The government does not identify climate change as a category within the budget and could improve transparency by applying climate change markers, such as the Rio markers on Adaptation and Mitigation, to national budgets.

Adaptation work is less well developed than mitigation. Priorities will include water and coastal cities. The Adaptation Fund globally does not have much money as yet from its 2% levy on CERs. The Government of Morocco hopes to access it directly, as well as through UNDP and World Bank, but does not at present have an accredited National Implementing Agency. The Fund has just approved its first projects which do not include Morocco.

#### **Challenges** to government and country ownership

- Competing budget priorities
- Current uncertainty in the Arab world
- Low priority of climate change for the private sector

#### **Opportunities** to government and country ownership

- Clear national plan and policy framework from second communication
- Vulnerability means that the issues will grow in importance
- Important international role, especially in renewables

## **4. Alignment**

Alignment considers how well external funders are channelling their aid in response to the government's development priorities and how they are helping to strengthen and increase the use of national systems, for example for budgeting, procurement and reporting. There are perhaps 30 different donors in Morocco and many of them are small. Alignment and harmonisation are therefore difficult. It is helpful, however, to have a diversity of donors with specialist expertise (for example the World Bank in macroeconomics and policy, AfDB in infrastructure, KfW in carbon financing, and AFD in local development). Three pilots for alignment in education, governance and public health are working well. Donors are funding gaps in a six year forward programme with good alignment and harmonisation.

Co-ordination meetings are held in the Environment sector twice a year led by Government. They tend, however, to be more about information sharing than joint planning and implementation. Climate Change was the primary topic for the discussions of this group held in May 2011. Government personnel tend to change fairly rapidly on the group which limits continuity. There is a role in harmonisation and alignment for informal meetings between donors as well as more formal government-led structures.

Defining and identifying aid for climate change in Morocco is very hard. Climate change and environment are not discrete budget sectors and climate change is an element in a huge range of public sector interventions. Identifying budget items is also difficult because climate change does not fit easily in current UN standard classifications and Rio markers are not used. There is no centrally-held information on donors working directly with NGOs, such as USAID.

Some of the Moroccan public sector institutions argue that each of the climate funds has its own priorities, and that Morocco is required to meet these in order to qualify, rather than getting support for its own plans. A preferred option would be a pooling of donor funds for technical assistance, funding and validation in order to support Moroccan priorities. One interviewee commented: “Sometimes it feels as though the mechanisms are driving the projects rather than the other way round”. All the international agencies have different procedures, which require a substantial up-front investment to understand. Large local institutions are able to cope with this, but some of the smaller agencies find that it remains very difficult. The second area of concern is that procedures are not flexible, and, perhaps more important, that they are not proportional. The same rigour is applied to small grants as to large loans. This is illustrated by the frustration of MASEN of not being able to get studies funded quickly. They say that it takes three to four months even for small studies, although the World Bank suggested that such lead times should only be six weeks. Studies are often slow to get going and co-ordination could be improved. The Department for the Environment noted one occasion when they waited so long for a World Bank response that they asked a bilateral donor for support, and had to backtrack when they got double funding.

On the other hand, ONE argues that donor and multilateral bank procedures are reasonable, while recognising that some initial investment is required to learn them. Donor procedures are slow and ONE suggests that local institutions need to anticipate more in advance. The speed of response varies between institutions. ONE highlighted good responses from AFD, EIB and IDB. They suggested that there is some rigidity in AfDB procedures. More concessional money is needed especially for poor regions and to support new technologies. Moroccan institutions such as ONE would like to see donors using local procedures, given that these have been proven over a long period. Another issue was the authority of the local offices of international donors. Moroccan institutions would like to see more delegated authority to local offices to speed decision making and accountability.

A good example of alignment is given by the Clean Technology Fund which has focussed strongly on Moroccan priorities of solar from regional funds, and wind power from the national CTF allocation as illustrated in the box below:

### Engagement with the Clean Technology Fund (CTF)

Morocco is currently preparing its projects for CTF funding as part of the Climate Investment Funds (CIFs). Morocco has not received funding from the Strategic Climate Fund. There are two main sources of funding from the Clean Technology Fund which are available to Morocco. The first is a regional allocation of \$197 million (out of a MENA total of \$750 million) which is focused on solar. The second is a national allocation of \$150 million. Both are co-managed between the AfDB and World Bank. The national CTF has been slow to develop projects, but is now being focussed on wind energy projects through ONE. It is difficult for the private sector to access this funding since all approvals go through Government and firms need to be nominated by Government to be eligible. Each Bank's systems are then used which sometimes entails needless duplication. It is expected that the CTF will leverage 3 times the initial allocation in lending from the banks (i.e. up to \$450m for the national scheme).

CTF is flexible because it is based on a committee and not on rules. But this also limits predictability. The regional CTF allocation has been critical to initial investment in solar power, which could not have gone ahead without its backing. There is concern that if the CIFs are not replenished then there may be a gap in funding before the Green Climate Fund comes on stream.

While a number of mechanisms exist for tracking various elements of international climate change financing at global and national levels, there is currently no comprehensive tracking system able to capture external climate change finance in Morocco. Examples of projects listed on global websites are as follows:

Example of current commitments by global funds in Morocco					
Project	Fund	Amount (\$US m)	Approved (year)	Amount disbursed (\$US m)	Focus
Promoting Wind Energy and Other Renewables in Morocco	International Climate Initiative	\$1.99	2010	\$1.99	Mitigation - general
Energy Efficiency Codes in Residential Buildings and Improvement in Commercial and Hospital Buildings	GEF Trust Fund - Climate Change focal area (GEF 4)	\$3.00		\$3.00	Mitigation - general
Energy Efficiency in the Industrial Sector	GEF Trust Fund (GEF 4)	\$2.73	2010		Mitigation - general
Integrating Climate Change to Increase Resilience of Agricultural and Water Sectors	Special Climate Change Fund	\$4.35	2009		Adaptation

[www.climatefundsupdate.org](http://www.climatefundsupdate.org)

Medium-Term Expenditure Frameworks (MTEF) in Morocco have been supported by sectoral ministries but not yet adopted by the Ministry of Finance. There has been an increasing trend towards budget support in Morocco which strengthens national systems. The World Bank has provided budget support for solid waste, and for energy in three tranches of \$100-150m each, although the latter was stopped due a lack of reform progress. The AfDB is considering a policy reform loan in the climate change sector with budget support that could be earmarked to help fund the subsidy required for solar generation projects.

### Challenges to alignment

- Standardised requirements for global funds – no flexibility for alignment with individual country systems
- Funds and programmes own procedures tend to dominate national systems
- No strong climate change co-ordination mechanisms currently exist within government
- No comprehensive tracking system to identify and monitor all climate change financing

### Opportunities for increased alignment

- Clear high level policy framework
- Public expenditure review will highlight priorities
- Government in strong position with respect to donors

## 5. Harmonisation

Donors are less important and more diverse in Morocco than in most African countries. The Paris Declaration does not have a particularly high profile. The desire for co-operation is evident, but there are few effective mechanisms in place. What is happening is more a patchwork of harmonisation on the basis of specific programmes. The largest funders of climate change work in Morocco are the multilateral Banks: WB, AfDB and EIB. The major bilateral donors in climate change in Morocco are Germany (KfW and GIZ), France (AFD) and, to a lesser extent, Japan. The European Commission Delegation works both to co-ordinate internally between DG Environment and EuropeAid, and to act as a focal point for members states.

There are examples of good harmonisation, where agencies are working together. There is trilateral co-operation between France, Germany and Japan in their programmes in the energy sector. Energy efficiency work has involved a range of partnerships between donors. Another example is the World Bank's \$400m Development Policy Loan in agriculture to support the Plan Vert, which was accompanied by a \$5m GEF project on adaptation technology.

There have been problems in co-ordination between the World Bank and AfDB. Limited delegation of responsibilities for both Banks means that complex co-ordination is required between head offices and local offices for both institutions. This can also lead to delays in responses and difficulties in synchronising missions for multi-donor projects. Many of the multilateral institutions are very dependent on head office expertise. Both Banks insist on using their own systems for CTF work with little benefit to the host country from such duplication. This tension risks being extended in discussions about the relationship between the Green Climate Fund and the potential African Green Fund.

### Co-ordination of donors for solar energy

Government chairs an environment group, but this tends to be a formal information-sharing body. Some donors felt that a donor-only group would be more effective. The Moroccan Agency for Solar Energy (MASEN) has introduced its own donor co-ordination meetings, to include both the multilaterals, World Bank, AfDB and EIB; and bilateral agencies, KfW/GIZ (Germany) and AFD (France). Monthly meetings chaired by MASEN have been proposed for this group, but these have been intermittent in the first part of 2011.

Some interviewees argued that there are too many studies by donors with too much overlap, and insufficient focus on delivering results. This in part reflects broader problems of the international system and the costs and dysfunctionality of having so many agencies.

International public institutions that interface with the private sector have found it difficult to develop operations in Morocco. There is no apparent market for MIGA-style guarantees. Local banks are liquid and multilateral banks find it hard to offer competitive loans. IFC largely provides technical advice in Morocco. AfDB wishes to upscale its support to the private sector and recruit a private sector expert, which will require clear delegation of responsibility from its Head Office, and appropriate instruments. Despite informal divisions of labour, there has been little effort, until recently, to keep track of the volume of funds being provided by each donor into their relevant areas of interest.

### **Challenges** to harmonisation

- Diverse range of DAC and non-DAC donors
- Each agency uses its own systems
- Varying degrees of delegation to country offices

### **Opportunities** for increased harmonisation

- Growing international experience of co-operation in a range of countries
- Co-ordination mechanisms exist which could be strengthened
- Good will from all parties

## **6. Managing for Development Results**

The 2008 Paris Declaration Monitoring Survey reiterated the need for donors and partner countries to make a joint commitment to managing resources to achieve desired national results. There is no national or multi-donor results framework for climate change in Morocco. National sectoral strategies include high-level targets, particularly on generation and energy efficiency, although the monitoring mechanisms for these are not clear. Individual projects have the normal range of indicators, but these are not consolidated at a national level. Morocco has strong sectoral plans for agriculture, water, energy and other sectors. Each of these tends to be co-ordinated by the relevant line Ministry. There is need to bring together these statistics in the climate change context to get an understanding of the overall progress being made.

There is scope for the GoM to give a lead in co-ordinating statistics on climate change programmes and results for both government and donor-funded programmes. One option here would be to distil down a report card of key indicators on climate change finance and aid effectiveness that could be used within government and also circulated to donors as the basis for dialogue. It is recognized that identifying desired results and measuring progress toward them, as well as using information on results to improve decision making and performance, requires capacity building. There is interest more broadly in the international community in pursuing such approaches and it would be useful to align indicators with those being developed and used elsewhere for comparison purposes. It is vital that results for Morocco are also seen in a regional context. This is particularly important in the energy sector, including the Mediterranean

Solar Plan initiative. Some instruments, such as the Clean Technology Fund, reflect the regional as well as the national perspective, but many remain focussed at the national level.

### **National climate change results**

The co-ordination of climate change work in Morocco through the Department for the Environment provides a focus for the collection of climate change data. There is no results framework yet in Morocco for measuring the impact of externally provided climate change finance. Mitigation targets have been clearly established on a sectoral basis and will be measured through Ministries. Donors tend to be somewhat disconnected from these approaches and there is need for an overall national framework covering both mitigation and adaptation that brings together both donor and government programmes.

Morocco's second national communication to the UNFCCC provides a wealth of data and information. Although this is not gathered into a systematic performance framework, it provides an excellent opportunity for developing such a framework. Given that the third communication will be prepared in a few years' time; this provides a target for the development of a scorecard.

An additional challenge in reporting on climate change is the lack of information being provided by development partners who are providing 'off-budget' financing. The government is not always aware of the external financing coming into Morocco for climate change activities and will need to become better informed to allow national reporting to portray accurate results and challenges. Regional climate change programmes are also likely to pose a challenge to national level reporting on results, as activities will not be confined to country borders.

### **Challenges** to management for development results

- No agreed national framework for tracking and monitoring climate change
- Current reporting more driven by international climate change architecture than Morocco's needs and priorities
- Some donors continue to provide climate change financing off-budget

### **Opportunities** for management for development results

- Opportunities for regional discussion and lesson learning on climate change results in the MENA region
- Strong framework from action plan and second national communication
- Increasing pressure to demonstrate results domestically and internationally

## **7. Mutual Accountability**

The Paris Declaration recognises that "aid is more effective when both partner governments and development partners are accountable, both to their respective publics and each other, on the use and management of resources to achieve development results". It calls for donors and partner countries to jointly assess (through existing country-level mechanisms) mutual progress

in implementing agreed commitments on aid effectiveness. The 2008 Paris Declaration Survey confirmed, however, that Morocco does not have a formal review of mutual accountability or assessment of progress made. The lack of a single forum for engagement between the Government and external partners is a key issue.

The Moroccan Government is accountable to Parliament. Local structures are strong at commune level. While the majority of citizens are not yet well informed about climate change, there is growing awareness around the climate-related issues that affect people at a personal level. Public interest in the issues has been demonstrated by the strong response to “Earth Day”. Morocco’s media are well established and a large proportion of the population access newspapers and digital media. Journalists are able to place issues on the national agenda and stimulate public debate. ADEREE provides training for journalists working on climate change.

Aid for climate change to Morocco looks set to increase, particularly when adaptation needs are assessed and addressed. Donors also have a role to play in becoming more accountable to the government, particularly through strengthening the predictability of their climate change financing. Reporting on funding commitments is a challenging element of the aid effectiveness agenda, not least because individual donors are restricted by their own internal requirements, procedures and timeframes for approving country programmes. Externally driven reporting mechanisms, including international requirements and the need for individual donors to report to their headquarters, often take precedence over the sharing of information at the national level.

There are a range of civil society organisations in Morocco. Local NGOs, including ENDA Maghreb, Targa and Ribat al Fath, are active and often focussed on community-level and local development issues. They are consulted as part of CDM procedures and several interviewees stressed the importance of involving civil society in climate change discussions. There is generally less experience among NGOs of strategic and international issues. WWF co-ordinates NGOs in the environmental sector, but generally the presence of international NGOs in Morocco is limited. Other manifestations of civil society are also important, including professional associations, universities and local institutions at the commune level.

### **Challenges** for strengthening mutual accountability

- Limited engagement by GoM with civil society and private sector on climate change activities
- Lack of a joint monitoring framework for climate change
- External reporting requirements and accountability of donors
- Limited strategic role for Moroccan NGOs

### **Opportunities** for strengthening mutual accountability

- Increased dialogue between government, donors and civil society
- Active role of NGOs in local development issues
- Improved communications networks and emerging media interest around climate change
- Private sector could increase their engagement around business related opportunities

## 8. The Private Sector

Morocco has adopted a market-based approach to development and is seeking to promote private sector development. Climate change provides both opportunities and threats to the private sector in Morocco. The National Chamber of Commerce (CGEM) has given a strong lead in co-ordinating private sector companies and has set up the CMPP.

### **General Confederation of Moroccan Companies (CGEM) and Moroccan Centre for Clean Manufacturing (CMPP)**

CGEM is an association of over 3000 direct members and has links with perhaps 30,000 companies in Morocco through member associations. CGEM has a strong vision for a “Green Morocco”, led by private sector initiatives. CGEM set up its environmental committee in 1998, which now embraces sustainable development and climate change issues.

In June 2000 CGEM and the Ministry of Industries jointly founded CMPP as a one-stop shop for companies in Morocco seeking to access climate change funds. It has contacts with all the major donors and is implementing projects in conjunction with many of them. Originally funded by the Government of Switzerland, it provides a range of awareness raising and technical assistance services. It promotes the adoption of green technology and production processes by existing companies and is also seeking to support the development of green industries in Morocco through technology transfer. Particular opportunities are envisaged in solar power, and waste treatment for both solid waste and waste water.

CMPP and CGEM aim to help Moroccan industry in adaptation work although this is less well developed. Particular concerns include the flooding of industrial areas especially in Tangiers. Morocco’s effective response to the requirements of the Montreal protocol is a positive example of what can be achieved.

CGEM and CMPP argue that public sector institutions, both domestic and international, are ill-equipped to respond rapidly enough to private sector requirements. CMPP has been working with the national pollution reduction fund (FODEP) which is supported by funding from KfW. Decisions on this are made by the Department for the Environment. CMPP have found procedures for this fund to be very slow - one application submitted in July 2010 is still awaiting approval (as at April 2011).

CGEM wants to see the international funds and donors doing more to innovate and strive for excellence. There are lots of studies, some of which are repeated, but what is needed is action. The idea was raised of a one-stop shop for the public sector funders, to be a counterpart to the one-stop shop for the private sector established by CGEM at CMPP.

In March 2011 the World Bank published a study looking at the potential for private sector involvement in solar power in Morocco. The report notes the success of the automotive assembly industry in Morocco which includes a new Nissan-Renault facility in the Tangiers Economic Zone. This suggests that manufacturing capacity and know-how exists in Morocco at a level such that, with a foreign partner, a successful new industry could be established in solar equipment. The study re-emphasises the importance of a regional perspective for power generation and the need to access export markets to Europe to benefit from the premium paid

for green power. In addition the industry could generate significant jobs and wealth for Morocco.

ANPME has concluded that there are few current opportunities for Moroccan SMEs in climate change work and environment is generally not a high priority. There are niches for companies where green credentials are helpful to marketing such as olive oil production. Consumer pressure plays an important role here, especially in Anglo-Saxon countries. Energy efficiency can be beneficial but requires financing. There may be some opportunities for SMEs in carbon trading projects. Lots of capacity is needed to engage with donors.

Morocco has substantial potential to engage with the Clean Development Mechanism. The experience of the one national fund established to promote projects domestically and then trade CERs internationally, however, demonstrates the challenges of realising this potential.

### **Fonds Capital Carbone Maroc (FCCM)**

The FCCM was the first Carbon Fund to be established in Francophone Africa. It was set up by the Caisse de Depot et de Gestion of Morocco in 2007. The French Caisse des Depots and the European Investment Bank joined in 2008. The initial fund is Dirham 300 million for the period 2008-2017. Its aim is to acquire CERs in Morocco and then to trade them in the international market. The fund has been operational for three years, but only one project has been signed. The processes for project preparation, approval, implementation and validation are proving extremely cumbersome. The Fund is finding that it takes 18 months to 2 years to get a project registered, and argues that these processes need to be simplified.

Most CDM projects worldwide are in the areas of renewable energy, energy efficiency, and fuel switching. Morocco has potential in all of these areas, but there is need for greater technical skills and project development capacity. There is also often a lack of legal skills from project developers, which prevents them from signing Emission Reduction Purchase Agreement (ERPA) contracts, and uncertainty about the post-2012 environment limits companies' willingness to invest. There are limited technical skills to develop CDM projects in Morocco. ONE retains a large measure of control and tender exercises can be slow (for example 15 months). As a country specific fund, FCCM faces competition from international funds that are able to source projects from a range of countries.

Over 50% of CERs have gone to China and only 2% to Africa. This suggests that support and instruments tailored to the specific needs and capacities of African countries are required. Africa needs to learn from the Chinese experience, but will also need greater support if it is going to compete. At the same time the development of capacity in environment and climate change must be given a stronger domestic political priority.

## **9. Conclusions**

Against the five Paris Declaration criteria for Aid Effectiveness, Morocco's performance on climate change finance is strong on ownership, and is making progress on alignment and accountability. There is room for improvement on harmonisation and results.

Morocco has demonstrated political leadership on climate change but needs greater capacity to develop and manage programmes. The capacity of Government is higher, and the role of donors is less, than in many of the other countries in the study. The Government has significant implementation capacity, but this is stretched by the current demand and will become increasingly so as new climate change financing instruments come on stream. There are thematic groups for donors in the main sectors and environmental focal points in many of these, but arrangements would be strengthened by having effective co-ordination groups specifically on climate change financing and projects, both within GoM and for donors.

Morocco is giving high priority to renewables which will require substantial external support. Morocco's bold approach to renewables and especially solar gives it the opportunity both to develop local private sector capacity in these sectors, although not at the high technology end, and to access significant resources in future from new funds coming on stream. Substantial concessional resources will also be needed for adaptation, including for coastal regions and oases. This is only beginning to be addressed and needs further work so that Morocco will be well positioned for future climate change funding. Development of projects for carbon trading through the Clean Development Mechanism has large potential for Morocco, but the processes are very cumbersome. Decisions on the allocation basis for the GCF will be highly significant for Morocco.

Donors are generally well-aligned with national priorities, but direct support to NGOs tends to fall outside the existing structure. Improved co-operation between the World Bank and AfDB would be at the heart of improved harmonisation and alignment. The Government should develop a national results framework which covers both nationally-funded and donor programmes including those through civil society.

There is scope for a stronger role for the private sector. Donors are generally ill-equipped to support the private sector, and their lending instruments are often uncompetitive given that local banks are highly liquid. Multilaterals have been criticised by as inflexible and slow, and procedures for accessing technical assistance could be streamlined and made more proportional to the size of the project.

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