





# ADAPTATION AL CONFERENCE ON ADAPTATION METRICS FOR WATER & AGRICULTURE

—— October 6<sup>th</sup> and 7<sup>th</sup> 2017 ——

## CONFERENCE VENUE

Mohammed VI Polytechnic University (UM6P), Ben Guerir (50km North of Marrakech)



# I - BACKGROUND

Adaptation to Climate Changes is a major topic of climate negotiations, as reflected in article 7 of the Paris Agreement, and constitutes, together with mitigation, one of the two pillars of the United Nations' strategy to fight global warming.

For developing countries, and particularly the most vulnerable ones, the issue is to adapt to a new world climate situation to which they hardly contributed, by looking for ways to thwart its impacts, whereas developed countries are more focused on mitigating these effects, through the transition to a low-carbon or even decarbonized economy.

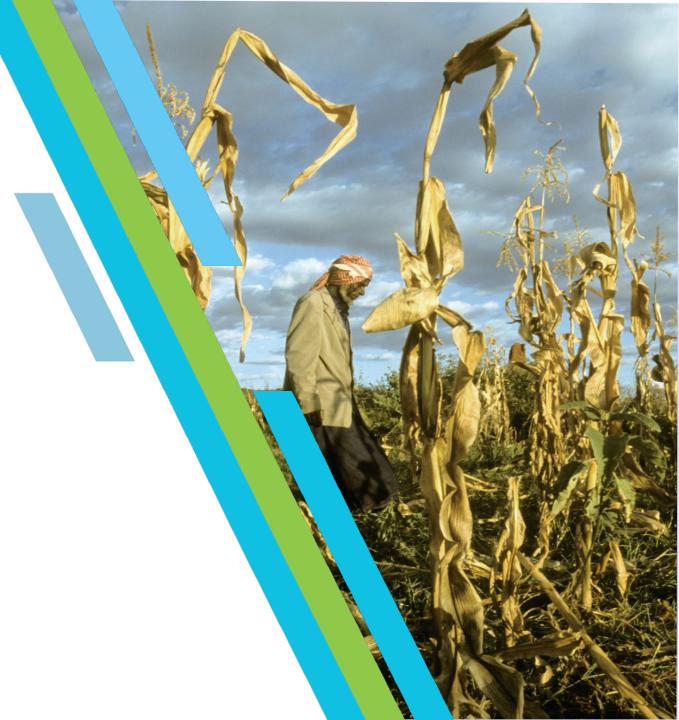
Mitigation projects get the highest share of climate finance support, because they quickly pay for themselves and because a universal way of counting progress exists, expressed in tons of carbon equivalent.

By contrast, adaptation actions are often difficult to separate or differentiate from sustainable development actions, and absolutely impossible to dissociate since development cannot be anymore conceived without taking in account climate changes.

Additionally, the distinction between adaptation and loss and damage is not always clear.

Therefore, if there is no clear universal definition of adaptation to climate changes, its quantification results even more difficult.

This is why adaptation metrics are urgently needed, to be as precise as possible and shared by all partners in order to ease the process of mobilization of financial support.







# **II - THE CONTEXT OF COP22:**

Focusing particularly on Africa, the COP22 in Marrakech highlighted the situation of this continent that encompasses dozens of the most vulnerable countries of the planet, which NDCs all particularly insist on Adaptation.

In this regard, the Scientific Committee of COP22 organized an international conference on Adaptation metrics in Morocco (Skhirate, near Rabat) on September 27, 2016.

The outcomes of that conference have been submitted by the Kingdom of Morocco to the Executive Secretariat of UNFCCC, and can be found online at:

#### http://unfccc.int/resource/docs/2016/apa/eng/inf02a01.pdf

On the other hand, during the Marrakech event, Adaptation was promoted through the engagement of donor countries to double its funding, whereas the Climate Finance Pathway presented by the Moroccan Presidency of COP22 considered "Increasing adaptation finance and deepening its impact" one of its core priorities.

During COP22, major initiatives have also been launched focusing on both Adaptation and Africa, like the "triple S" addressing Security, Stability and Sustainability through a set of preventing measures against drought, land degradation and forced migration in the continent, another one on Adaptation of African Agriculture (Triple A) focusing on food security in changing climate conditions, or the one on "Water for Africa", making this vital resource part of the solution to climate changes.

The COP22 presidency aims to continue its work of enhancing adaptation through a simplification of financing processes, and many funding bodies like the World Bank Group or the members of the International Development Finance Club (IDFC) initiated a reflection on developing suitable metrics in this regard.

The Fijian COP23 Presidency is also particularly interested in adaptation to climate changes, since it champions the worries of particularly vulnerable small island states.

This momentum calls for the organization of a second conference on adaptation metrics, which the COP22 decided to organize together with Mohammed VI Polytechnic University.



## **III - OBJECTIVES OF THE CONFERENCE:**

The first conference on Adaptation metrics included specific focus on i) resilience, ii) sectorial and iii) Sustainable Development Goals perspectives.

The second focus, based on a sectoral approach, proved to provide concrete indicators, the only limitation being that they are sector specific. On one hand, the opportunity for in-depth discussions about sectoral metrics is there, on the other hand Water and Agriculture are the top two adaptation priorities expressed in NDCs, according to a UNFCCC survey.

This second conference will thus focus on Adaptation metrics for Water and for Agriculture, each one separately, even though there are obvious bridges between both sectors.

The main objective of the conference is to provide a discussion platform between finance institutions, research scientists and the actual project holders, especially from the African continent, in order to convene a clearly defined common vision of rules and indicators regarding metrics for these two sectors.



## IV - PARTICIPANTS TO THE CONFERENCE:

The target audience for this conference is:

#### **INTERNATIONAL FINANCIAL INSTITUTIONS:**

particularly the specialized funds (GCF, GEF, AF), the Multilateral Development Banks (WBG, AfDB, BEI, EBRD, IDB, KfW...) and the members of the International Development Finance Club.

#### **NATIONAL FINANCIAL INSTITUTIONS:**

stakeholders of the Moroccan roadmap aligning the finance sector with sustainable development (AMMC, ACAPS, CFC, Casablanca Stock Exchange, GPBM, FMSAR)

#### **PROJECT HOLDERS:**

Private or public water operators (ONEE, Veolia, Suez...), chambers of Agriculture, national development agencies, NGOs, territorial collectivities... in particular from the African continent

#### **THINK TANKS:**

IDDRI, IISD, WRI, ODI, DIE, IRD, OCPPC, IDRC

#### NATIONAL OR INTERNATIONAL ORGANIZATIONS, IN PARTICULAR OF THE UN SYSTEM:

IOM, GIEC, FAO, UNDP, UNEP, UNESCO, WHO, OECD, IOM, AFD, GIZ, JICA, ACDI, EU, US AID...

#### MINISTRIES OF WATER AND OF AGRICULTURE:

especially from the African continent

#### **CONCERNED NATIONAL STATE DEPARTMENTS:**

Moroccan ministries of Agriculture, Water, Finance, Sustainable Development, Interior, Direction of National Meteorology...

#### **ACADEMICS:**

Universities, Engineering Schools and specialized institutes (INRA, INRH, UN-Wa<mark>ter, IAIE-ONEE, students and researchers (particularly from Mohammed VI Polytechnic University)</mark>



## **V** - LAYOUT OF THE CONFERENCE:

The conference will take place over two days around a series of focused technical panels to discuss specific matters related to the sectors of Water and Agriculture.

After an opening session on the first day to set the scene, each day will consist in two panels of one hour each, followed by corresponding break-out sessions in the afternoon. An optional local field visit will be offered to participants who do not wish to attend the break-out sessions.

The panels will include four to five presentations (from project holders, development agencies, international experts, NGOs or academics) sharing experiences of measuring adaptation, with challenges being considered as much important as are successes.

For each day, one panel will be devoted to productive metrics of the sector (measuring performance in terms of growth or efficiency) while the other will tackle resilience metrics of the sector (how effects of climate change can be prevented and reduced).

Each panel will be discussed in the afternoon in one hour break-out sessions, the participants being segregated in two groups while each of the two sessions of the day will be discussed in parallel with the other, twice subsequently.

The outcomes of these four break-out sessions will be restituted at the closing session of the conference, in an open debate with financial institutions.

The call for posters will enable additional presentations to be displayed throughout the various digital screen at the conference venue, while the six plenary sessions will be webcasted thus could be followed from anywhere in the world.

### VI - VENUE OF THE CONFERENCE:

The conference will be hosted at the brand new facilities of University Mohammed VI Polytechnic (UM6P) in Ben Guerir, 50 kilometers North of Marrakech.

This Green, Knowledge Based, & Impact University has been recently inaugurated by His Majesty King Mohamed VI in January 2017. This young university as a world class academic educational and research system, and a promising R&D and Innovation prospects leading to technological solutions, is addressing the African continent's issues and challenges especially those associated the nexus water energy agriculture for food security, taking into account climate changes within the framework of sustainable development.

The UM6P has unique features in its living labs (real scale facilities) concepts related to green energy, experimental farm, advanced experimental mine, chemical innovation hub, ... amongst others. In this semi-arid region, climate changes are easily measurable through increased heat and water scarcity.

Beside exploring new concepts of sustainable development, like the green city concept, the university is located in an environment surrounded by various examples of sustainable water use and agriculture, as well as to the Green Energy Park, testing new solar energy techniques.

Participants to the conference will be staying mostly in Marrakech, and a transportation system will be organized to Benguerir forth and back.





# **VII** - PRELIMINARY PROGRAM OF THE CONFERENCE:

The Conference is scheduled to take place at Mohammed VI Polytechnic University, in Ben Guerir, on October 6 and 7.

# Friday, October 6

08h00 - 08h45 :	Transportation Marrakech-Ben Guerir
08h45 - 09h30 :	Coffee /Registration
09h30-10h00 :	Opening Ceremony: -Welcoming word (University UM6P President) -Opening remarks (COP22 President) -Special address (African Agriculture Minister) -General Keynote (GIEC)
10h00-10h30 :	Setting the scene: -Restitution of the outcomes of the first conference on metrics (September 2016) -Presentation of the layout of the conference (Scientific Committee) -Keynote scoping Water (TBD)
10h30-11h30 :	Plenary Session 1 = WATER MOBILIZATION & EFFICIENCY.  How can we measure an effective and sustainable mobilization of the Water resource (Dams, catchment, desalinization, treatment)?  How can we measure water efficiency (supply and distribution infrastructures)?  • 4 to 5 interventions.
11h30-11h45 :	Coffee Break
11h45-12h45 :	Plenary Session 2 = PROTECTION AGAINST WATER HAZARD.  How can we measure the impact of protection infrastructures against flooding, how can we prevent water scarcity and how can protection be linked to health hazards, etc  • 4 to 5 interventions.
12h45-14h00 :	Lunch Break
14h00-15h00 : And / or 15h15-16h15 :	Break-out session 1 = WATER MOBILIZATION & EFFICIENCY.  A guided debate on proposed criteria and methods to measure how projects can optimize the transportation, distribution and use of water. (Discussion in two groups, one hour each)
15h00-15h15 :	Coffee Break
14h00-15h00 : And /or 15h15-16h15 :	Break-out session 2 = PROTECTION AGAINST WATER HAZARD.  A guided debate on proposed criteria and methods to measure how projects can make ecosystems and constructions resilient to flooding, droughts, storms, etc.  (Discussion in two groups, one hour each)
14h00-16h15 :	A field visit will be proposed to participants that don't take part to the beak-out-sessions
16h15-17h00 :	Transportation Ben Guerir-Marrakech
17h00-18h00 :	Visit of the Museum of Water in Marrakech
19h30-21h00 :	Gala dinner in Marrakech (for the panelists and moderators)

# Saturday, October 7

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08h00 - 08h45 :	Transportation Marrakech-Ben Guerir
08h45 - 09h30 :	Coffee /Registration
09h30 -10h45 :	-Keynote scoping Agriculture metrics (TBD) -Presentation of the layout of the day (Scientific Committee)
09h45 - 10h45 :	Plenary Session 3 = AGRICULTURAL WATER & AGROECOLOGY: -How can we measure the efficiency of collecting, distributing and using irrigation water for agriculture? - How can we measure the setting up and productivity of agroecological systems (agroforestry, pastoral management, soil preservation measures)? • 4 to 5 interventions.
10h45-11h00:	Coffee Break
11h00-12h00 :	Plenary Session 4 = CLIMATE RISKS AND HAZARDS FOR AGRICULTURE:  How can we measure the success of climate risk reduction (agricultural insurance, preventive + reaction measures, climate monitoring network).  • 4 to 5 interventions.
12h00-13h15 :	Lunch Break
13h15-14h15 : And / or 14h30 – 15h30 :	Break-out session 3 = AGRICULTURAL WATER & AGROECOLOGY.  A guided debate on proposed criteria and methods to measure how projects can optimize use of agricultural water and the sustainable productivity of agroecological systems. (Discussion in two groups, one hour each)
14h15-14h30 :	Coffee Break
13h15-14h15 : And / or 14h30 – 15h30 :	Break-out session 4 = CLIMATE RISKS AND HAZARDS FOR AGRICULTURE  A guided debate on proposed criteria and methods to measure how projects can make food security more resilient to climate hazards. (Discussion in two groups, one hour each)
13h15-15h30 :	A field visit will be proposed to participants that don't take part to the beak-out-sessions
15h30-16h00:	Coffee Break
16h00-18h00 :	Presentation of the outcomes of the break-out sessions 1 to 4.  Open debate with financial institutions Closing of the Conference.
18h00-18h45 :	Transportation Ben Guerir-Marrakech

