



**SAHARA  
AND SAHEL  
OBSERVATORY**

**APPROACHES AND TOOLS  
FOR MONITORING AND EVALUATING  
DEVELOPMENT PROGRAMS**

Middle East and North Africa Desert Ecosystems  
and Livelihoods Program (MENA-DELP)

*This booklet was produced as part of the MENA-DELP project (Middle East and North Africa – Desert Ecosystems and Livelihoods Project)*

Observatoire du Sahara et du Sahel © 2017

Approche et outils pour le suivi-évaluation des programmes de développement  
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# Middle East and North Africa (MENA)

“Climate  
Hotspot”





Though the North Africa and Middle East (MENA) region contributes very little to greenhouse gas emissions, it is considered as one of the regions the most exposed to climate change and is hence qualified as a climate hotspot.

Due to its geographical location and the wide extent of its desert and arid areas, the countries of the MENA region are highly affected by the adverse impacts of climate change. Agriculture and natural resources exploitation, main pillars of the region development, face serious challenges. Most of the development sectors in the region are threatened by climate change and projections show that agricultural production may decrease by 40% due to climate change (Pluriagri, 2015).

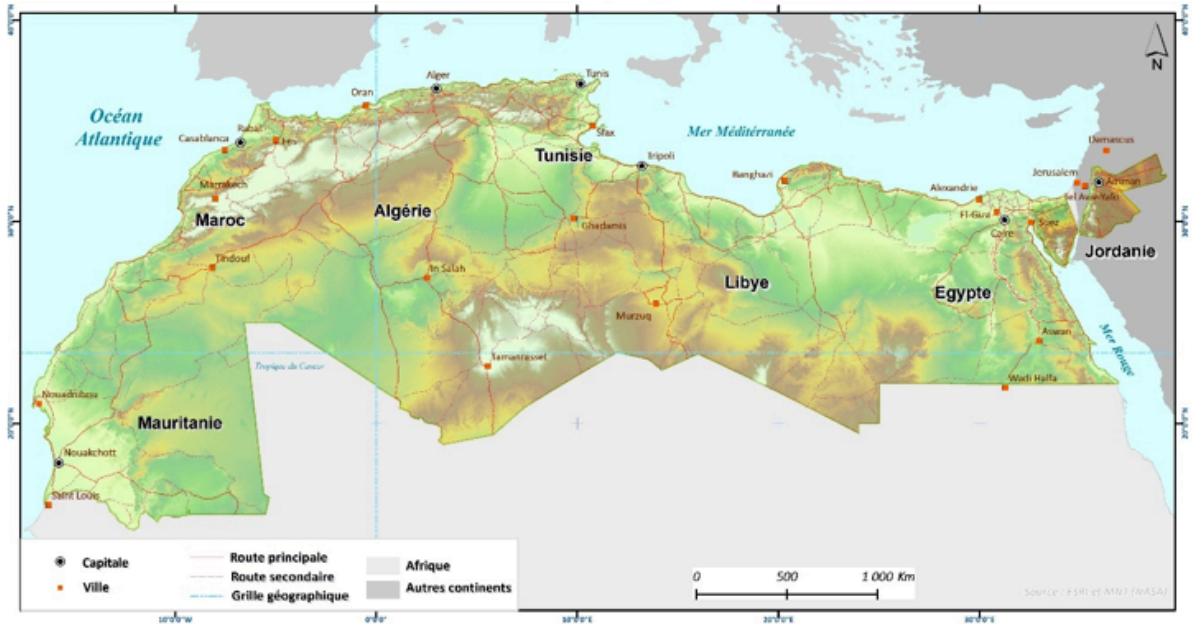
*The Intergovernmental Panel on Climate Change (IPCC) predicts a warmer, drier and more variable climate in the future*

Climate change threatens to increase food insecurity and to induce more pressure on natural resources which may lead to chronic shortage of resources and hinder the economic development of the MENA countries.

This situation will foster a favourable ground for conflicts, population movement, illegal migration, poverty, social inequality and instability. The economies of the region will be highly affected by the adverse impacts of climate change as available projections indicate that the GDP will decrease by 0,4% to 1,3%.

The countries of the MENA region have been committed, since the ratification of international environmental conventions, to develop and implement specific initiatives and programs towards achieving the Sustainable Development Goals (SDGs).

**MENA-DELP zone of interest Map :** Algeria, Egypt, Jordan, Libya, Morocco, Mauritania and Tunisia, OSS 2017



# THE MENA-DELP PROGRAMME

## Middle East and North Africa Desert Ecosystems and Livelihoods Program

### *Objectives*

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The World Bank, in partnership with several countries and the GEF, launched the MENA-DELP regional program in 2011 for a duration of 10 to 15 years. The MENA-DELP program aims to contribute to the improvement of livelihoods in desert ecosystems by exploiting their value in a sustainable manner with a view to optimizing the flow of goods and services related to Desert areas.

The MENA-DELP program consists of six projects, including five national projects (Algeria, Egypt, Jordan, Morocco and Tunisia) and one regional project coordinated by the Sahara and Sahel Observatory. The national projects aim at creating specific economic development opportunities for Desert environments taking into account the health of the Desert biome and the diversity and vast potential of innovative income-generating activities relative to adaptation practices and know-how. The regional project focuses on Knowledge and Experience sharing in the field of Sustainable Desert Ecosystems management.

### *At the régional level*

The MENA-DELP regional « **umbrella** » project is coordinated by the Sahara and Sahel Observatory over a duration of four years (2013-2017). It aims to strengthen cooperation among the institutions involved in the MENA-DELP program implementation, notably through :

- **Improved knowledge of the linkages** between ecosystems and livelihoods;
- **Improved knowledge-sharing systems on questions** related to desert ecosystems and livelihoods;
- **Improved networks and information flows** on desert ecosystems at the national and international levels.

The MENA-DELP regional project has helped beneficiary countries to develop a better understanding of the most important and essential political levers for an optimal utilization of natural resources in the desert areas.

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**MENA-DELP Program : *Optimizing the flow of Deserts goods and services.***

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### *At the national level*

The national investment projects implemented in Algeria, Egypt, Jordan, Morocco and Tunisia aim at optimizing the provision of Desert goods and services in order to improve livelihoods. These projects concern different economic sectors ranging from oasis agriculture and rangelands management to ecotourism. An integrated ecosystems approach has been used to ensure the improvement and sustainability of the project achievements and outcomes. An emphasis is also put on participatory approaches, capacity building and local knowledge promotion.

<b>Algeria</b>	Improved Desert Ecosystems and Climate Resilient Oases Project
<b>Egypt</b>	Improving the Living Conditions of the Bedouin
<b>Jordan</b>	Rehabilitation of Rangelands in the Bedia
<b>Morocco</b>	Social and Integrated Agriculture project (Safi & Souss Massa region)
<b>Tunisia</b>	Ecotourism and Conservation of Desert Biodiversity (Gafsa, Bouhedma & Dghoumes region)
<b>Tunisia</b>	Oases Ecosystems and Livelihood Project

This programmatic approach will in the long term improve the desert populations' livelihoods and increase the resilience and adaptation of desert ecosystems and communities to different pressure factors, climate change in particular.

The national projects aim to :

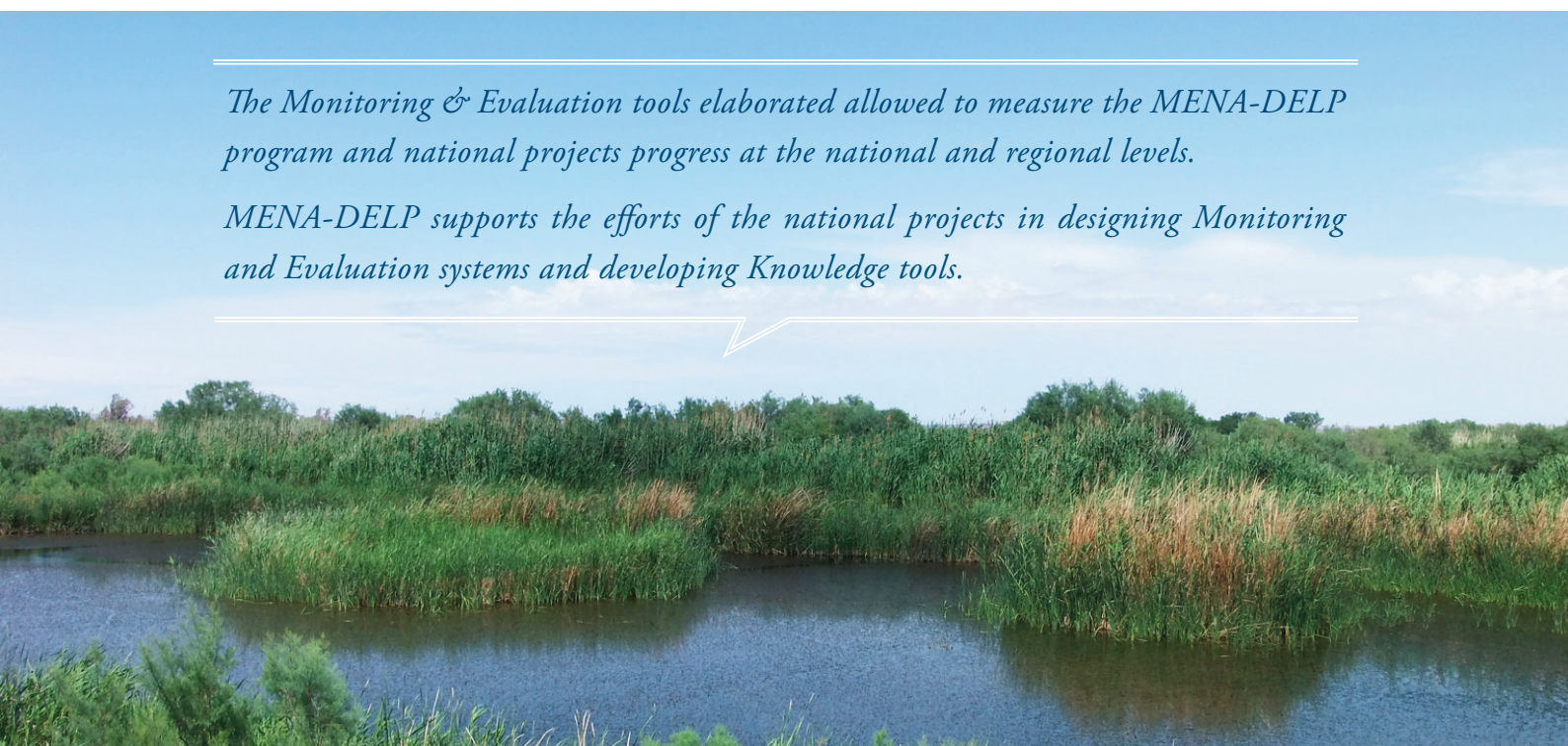
- Ensure the sustainability of investments implemented through an integrated ecosystems management approach ;
- Promote and implement investments in the agriculture and rural development sectors ;
- Increase the resilience of local communities to climate variations and social/societal changes.

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*The Monitoring & Evaluation tools elaborated allowed to measure the MENA-DELP program and national projects progress at the national and regional levels.*

*MENA-DELP supports the efforts of the national projects in designing Monitoring and Evaluation systems and developing Knowledge tools.*

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# MENA-DELP PROGRAMME AND MONITORING & EVALUATION





# WORKING AXES

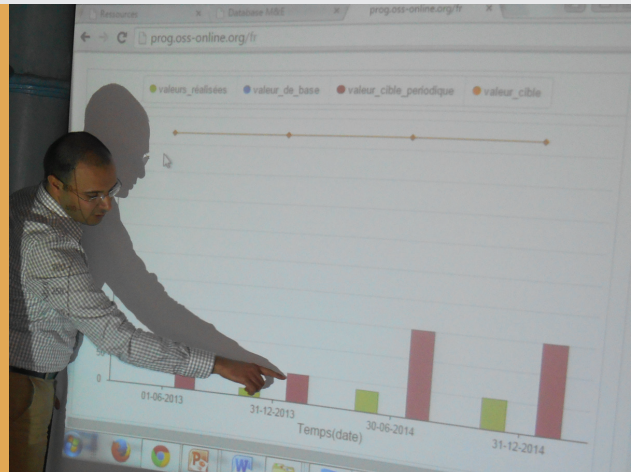
## MENA-DELP PROJECT

### KNOWLEDGE MANAGEMENT AND DISSEMINATION

*Etablissement et renforcement des réseaux existants entre les institutions nationales et régionales pour encourager la gestion et le partage des connaissances à travers l'élaboration de produits de connaissances thématiques et l'organisation d'ateliers de formation et de réflexion et des voyages d'études et d'échange.*

### MONITORING-EVALUATION

*Set up a monitoring and evaluation system of the MENA-DELP program on the regional level for the aggregation of the national projects' results indicators.*



# MONITORING & EVALUATION

*« The monitoring and evaluation of the natural resources state has for a long time accompanied the exploitation of these resources by rural communities. Formerly, these communities used to conduct a permanent monitoring and self-assessment of the natural resources state and environment capacity to fulfill their fundamental needs. They took, within this community framework, the necessary decisions to safeguard their ecosystems so that their lifestyle has been shaped accordingly ». (Monitoring and evaluation of CCDI/OSS national programs of action, 2006)*

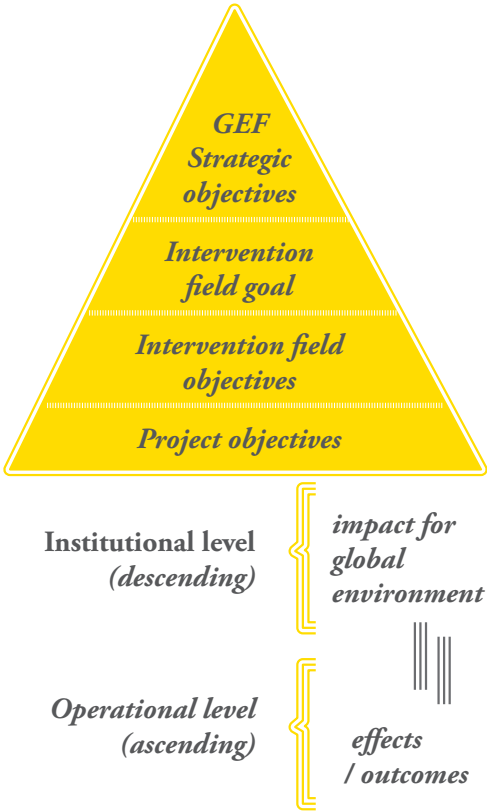
Monitoring and evaluation is an important component in the implementation of development projects and programs and helps to ensure the coherence of activities and the relevance of related results. The main objective of monitoring and evaluation is to provide information useful for assessing efforts made to achieve the project/program expected results and to estimate the level of objectives attainment and project impacts.

Monitoring and evaluation is a basic component of the **MENA-DELP** program. It is included both in the national projects and the regional project. In addition to being useful for learning lessons, allocating resources, bringing corrective measures and improving future programs, the monitoring and evaluation component is used to report on the projects implementation to the main stakeholders.

All the interventions are controlled by systematic monitoring-evaluation activities for the purpose of evaluating their performances and ensuring the consideration of lessons learned in the projects implementation process.

Though belonging to the same program, the national projects tackle different issues and include a wide range of activities which requires the development of harmonized M&E tools for a better monitoring and assessment of performances and achievements.

The MENA-DELP national projects are designed based on a Result-Based Management approach (RBM) and require two-level monitoring and evaluation systems: performance monitoring and impact monitoring.

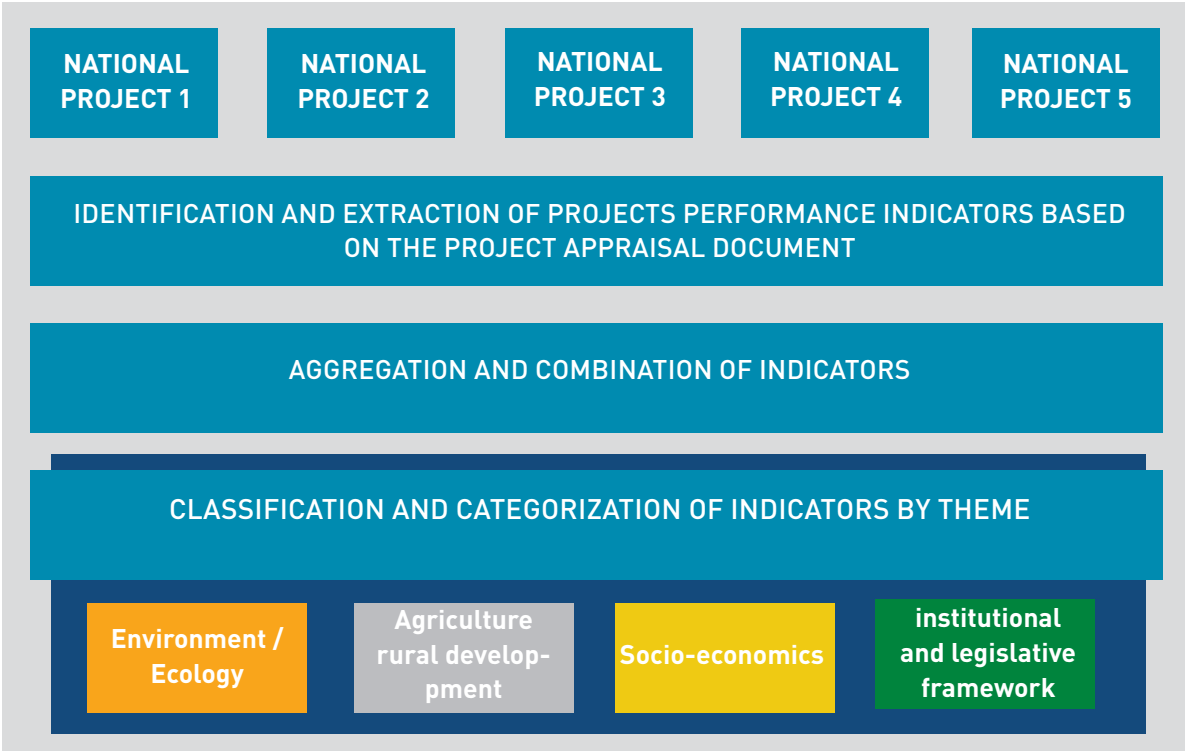


*Result-Based Management framework  
Source : Global Environment Facility, GEF 2011*



The design, development and operationalization of the **MENA-DELP** monitoring tools were conducted based on an integrated and standardized approach that takes into account the needs for harmonizing the national projects' indicators and the Result-Based Management approach developed by the GEF.

OSS has adopted a participatory process which aims to involve the national projects' managers in the design and development of the **MENA-DELP** monitoring and evaluation system through a series of consultation and exchange workshops. This approach helped monitoring and evaluation experts, since the project inception, to identify, validate, and develop an indicators grid and reporting tools.



*Indicators harmonization methodological approach*



# MONITORING AND EVALUATION TOOLS DEVELOPED BY THE MENA-DELP

## Online platform for Knowledge exchange and monitoring-evaluation

### What ?

An information system integrating a set of tools dedicated to information sharing and performance indicators management and evaluation. The platform facilitates also the sharing of knowledge products elaborated in the regional project framework.

### For whom ?

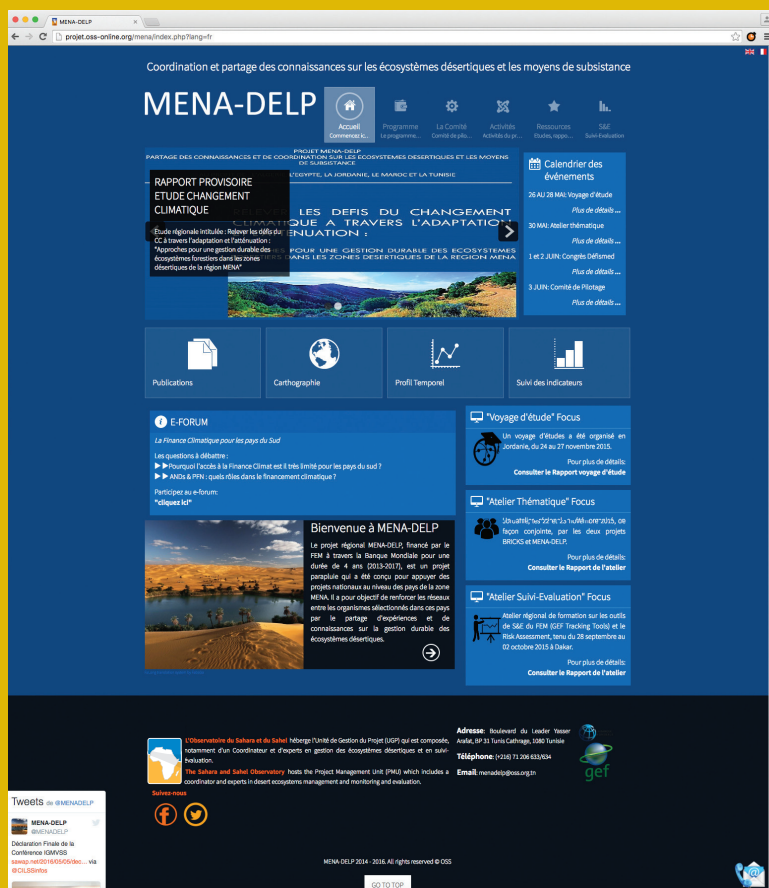
The platform is destined to a large public :

- MENA-DELP national projects managers,
- Steering committee members,
- Monitoring and evaluation experts
- Civil society representatives

### How ?

A simple click on the resources and activities sections gives access to various knowledge products on the different themes addressed by the project.

<http://www.oss-online.org/mena-delp/index.php/fr/>



# Database for centralizing and managing monitoring-evaluation indicators

## What ?

The Monitoring and evaluation database concerns two levels of interventions, namely :

- The MENA-DELP program
- The national projects and the regional project.

This tool allows users to consult the Monitoring and evaluation indicators database thanks to a graphic display of the projects progress status. For a better assessment of each progress, the tool shows the values to be attained by the indicator periodically (annual targets) and at the end (final target).

## For whom ?

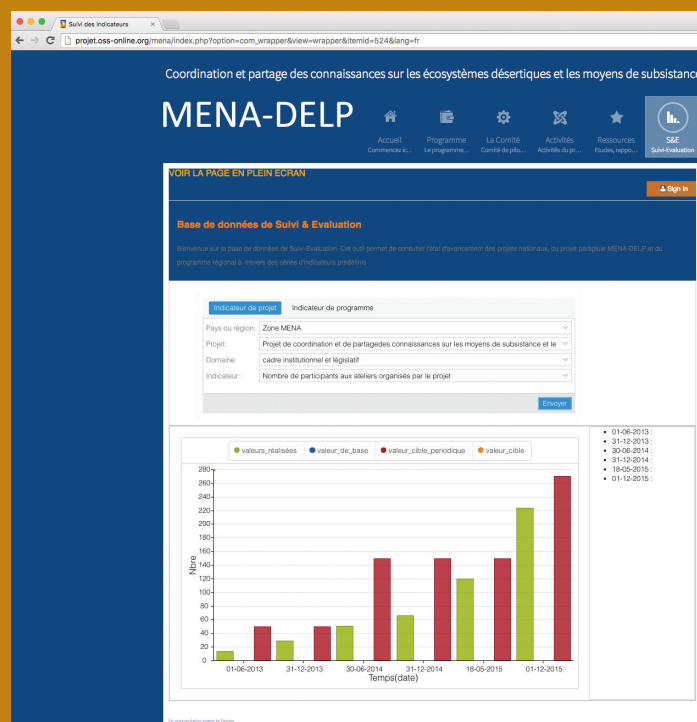
The database is destined to three levels of users :

- General public
- Projects monitoring-evaluation experts
- Program and regional project managers

## How ?

The monitoring-evaluation interface allows projects managers to regularly enter the new values of their performance indicators for each project using specific authentication parameters (login and password). The feeding of the database takes into account the indicators validation dates and traces their evolution over time.

The database allows to automatically calculate the MENA-DELP Program's indicators through the aggregation of the national projects' indicators as described in the logic grid (aggregation function).



L'Observatoire du Sahara et du Sahel (OSS) Nbergel (Unité de Gestion du Projet (UGP) qui est composé, notamment d'un Coordinateur et d'experts en gestion des écosystèmes désertiques et en suivi-évaluation.  
The Sahara and Sahel Observatory hosts the Project Management Unit (PMU) which includes a coordinator and experts in desert ecosystems management and monitoring and evaluation.



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# Mapping Interface : Publication / Exploitation / Thematic Maps

## What ?

This tool offers the possibility of sharing a set of information layers (maps) on the MENA-DELP Program's different themes of interest.

### Natural resources maps :

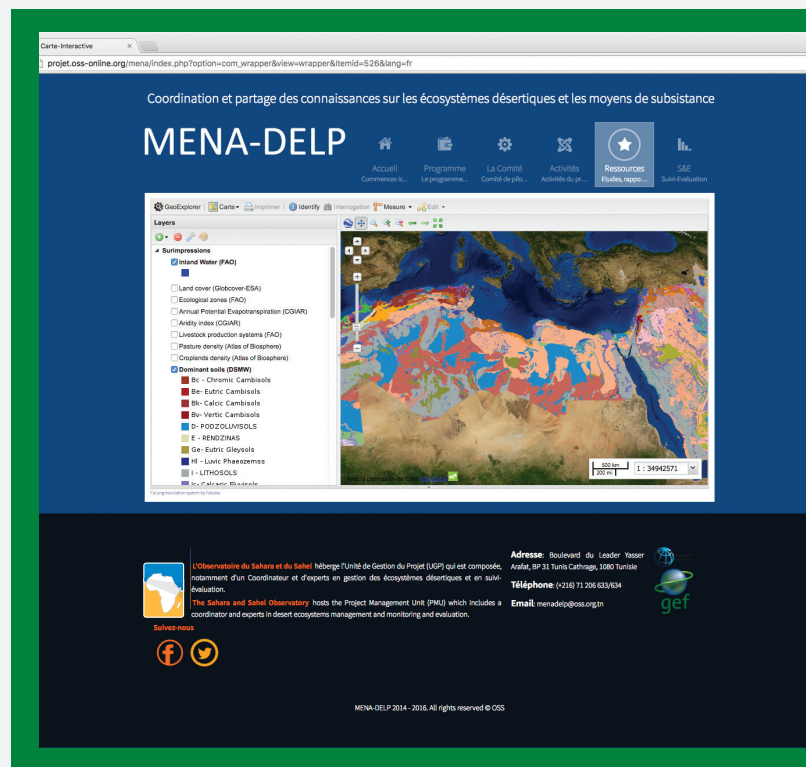
- land use
- Ecological zoning
- Soil type

### Climate maps :

- Aridity index
- Evapotranspiration
- Precipitations

### Socio-économique maps :

- Agricultural lands,
- Grazing,
- Animal production systems



## For whom ?

The M&E managers need information on the climate, ecological and socio-economic situation of the projects zones. This information serves to interpret the values of measured indicators to estimate their potential evolution.

## Comment ?

The data are stored and disseminated via a geographic server and the visualization space allows to manipulate these data (arrangement, movement on the maps, legends, etc.).

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**The data extracted from international and regional databases were edited using a Geographic Information System and disseminated through a map server. The client application integrated into the MENA-DELP web site allows to retrieve these data and display them to the users.**

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## Spatio-temporal tool for climate/ecological indicators monitoring

### *What ?*

This tool aims to better valorize geo-referenced climate and ecological data in line with the national projects' needs. Provided in a near-real-time and over reference periods, these data allow to evaluate the impacts of projects field activities and furnish information on the major natural factors that may affect the projects outcomes.

### *For whom ?*

These climate/ecological data are very useful for monitoring and evaluating sustainable ecosystem management projects/programs, especially in Desert areas. They allow monitoring and evaluation experts to evaluate the impacts of the projects field activities and to interpret their outcomes.

### *How ?*

Series of temporal vegetation and precipitation indices issued from Earth Observation data are integrated into this tool.

This tool allows the display and consultation of a series of historic biophysical data through the visualization of curves and graphics reflecting the evolution of spatialized data and indicators over time :

- Visualize indicators pixel values for a given year in a given zone

- Visualize indicators evolution over time and other parameters such as averages, anomalies, difference compared to averages, maximums/minimums, standard deviations

### *Address :*

By focusing on a particular period of time and a particular point in the MENA-DELP zone, the following curves are displayed :

**VALUE :** Variation of the index value over the selected period,

**MAX :** Variation of the index maximal value,

**MIN :** Variation of the index minimal value,

**MEAN :** Variation of the index mean value.



Coordination et partage des connaissances sur les écosystèmes désertiques et les moyens de subsistance

# MENA-DELP

ASTUCES D'UTILISATION

Accueil Programme La Comité Activités Ressources S&E

Profil Temporel

31° 39' 37'' N 13° 49' 3'' E

[NDVI - Spot Vegetation] Normalized Difference Vegetation Index

De 2000-01-01 vers 2000-12-31

— VALUE

L'Observatoire du Sahara et du Sahel héberge l'Unité de Gestion du Projet (UGP) qui est composée, notamment d'un Coordinateur et d'experts en gestion des écosystèmes désertiques et en suivi-évaluation.

The Sahara and Sahel Observatory hosts the Project Management Unit (PMU) which includes a coordinator and experts in desert ecosystems management and monitoring and evaluation.

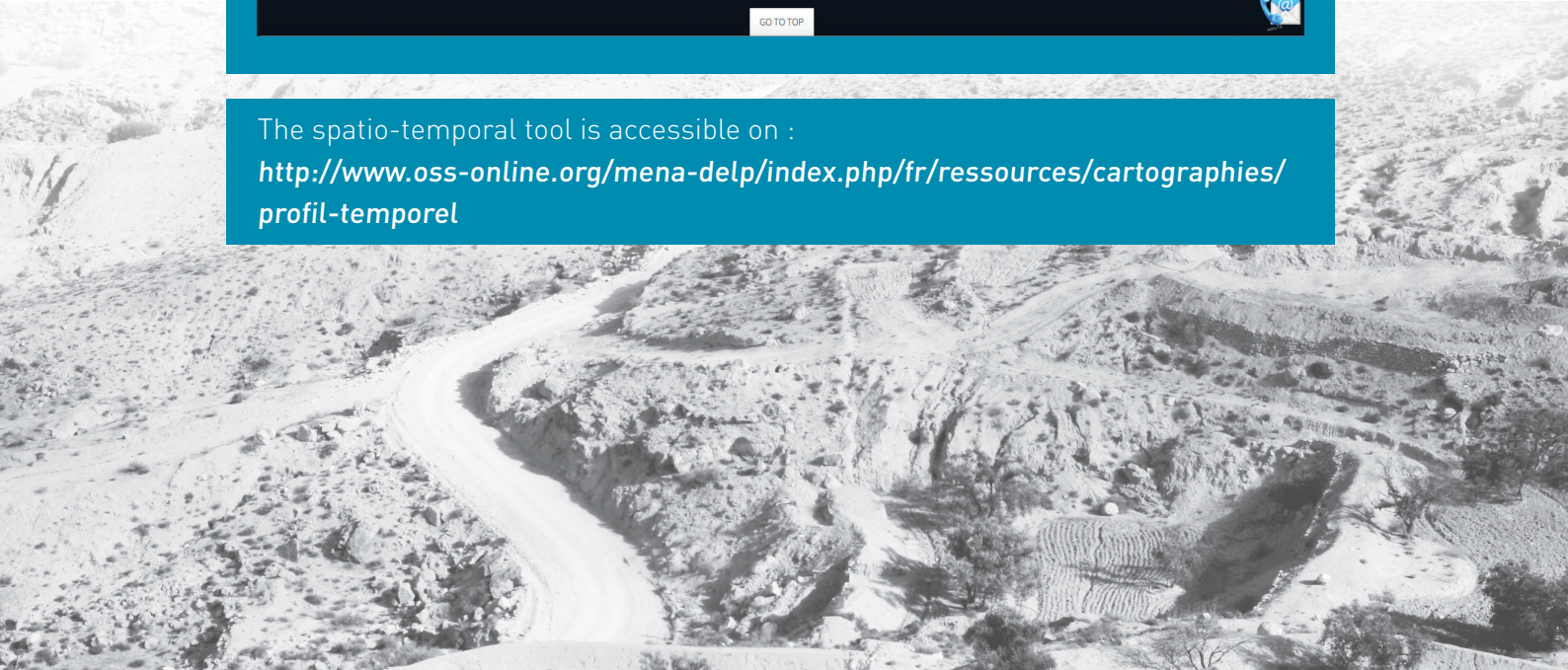
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Suivez-nous

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The spatio-temporal tool is accessible on :  
<http://www.oss-online.org/mena-delp/index.php/fr/ressources/cartographies/profil-temporel>






## Training of an Experts Network Online Exchange Forum

The online discussion forum was launched on the MENA-DELP information system and aimed to discuss key issues, lessons learned, emerging experiences and political implications related to the sustainable use of desert goods and services.


The main themes tackled were selected in accordance with the needs expressed by the Program beneficiaries :

- Monitoring-Evaluation : concept, methodology and monitoring-evaluation system ;
- Climate finance and financial mobilization difficulties faced by the South countries ;
- Post Cop21 UNFCCC and Post-Paris prospects and opportunities for the MENA region ;
- Reduction of climate change impacts on forest ecosystems in the MENA arid and semi-arid areas ;
- Ecosystem Natural Capital Accounting ;
- Land Degradation Neutrality (LDN) and countries commitments ;
- Oasis production and by-products valorization in the MENA region ;
- Oasis ecosystems and their contribution in achieving Land Degradation Neutrality (LDN).

**E-FORUM**  
**LA FINANCE CLIMAT**



MENA-DELP : Coordination et partage des connaissances sur les écosystèmes désertiques et les moyens de subsistance dans la région MENA



**Pourquoi l'accès à la Finance Climat est-il très limité pour les pays du sud ?**

**Rendez-vous dans notre forum en ligne du 15 au 28 février 2016**

**Introduction : L'accès aux Fonds Climat pour assurer un développement économique vert**

La 21<sup>ème</sup> session de la Conférence des Parties (COP21) de la Convention-Cadre des Nations Unies sur les Changements Climatiques (CCNUCC) a débouché sur l'Accord historique de Paris qui aspire à stabiliser la température mondiale « nettement en dessous » de 2°C d'ici à 2100 par rapport aux niveaux préindustriels. Encore mieux, les Parties ont été encouragées à continuer à fournir des efforts supplémentaires en vue de limiter l'augmentation de la température à 1,5°C, et ce suite à la doléance des pays les plus vulnérables au Changement Climatique, et notamment les Etats insulaires menacés par l'élévation du niveau de la mer.

Selon les dernières estimations faites sur la base des engagements de réduction des émissions des gaz à effet de serre (les fameuses CPDN ou JNDCS en anglais), principale cause du Changement Climatique, la trajectoire du réchauffement planétaire serait proche de 3°C à l'horizon 2100. Les pays Parties de la convention ont alors convenu de la nécessité de mettre en place un cycle de révision des engagements tous les 5 ans afin de réduire ou combler l'écart entre la somme de ces engagements et les efforts nécessaires pour atteindre l'objectif des 2°C.


L'engagement commun pour un futur sobre en Carbone pris lors de la conférence de Paris sur le climat, représente une opportunité sans précédent pour l'Afrique. Le continent dispose d'énormes gisements d'énergies renouvelables et de forts potentiels de séquestration de Carbone. Il n'est plus concerné uniquement par l'adaptation mais est appelé à prendre la place qu'il mérite sur les questions liées à l'atténuation. Autant d'atouts lui permettent la mobilisation de partenaires techniques et financiers pour soutenir ses efforts dans cette voie de développement durable au profit de l'ensemble de l'humanité.

**A propos du e-forum**


A mi-chemin entre la Conférence des décisions (COP21 - Paris 2015) et la Conférence de l'action (COP22 - Marrakech 2016), l'OSS se propose de lancer un forum de discussion dans le cadre du projet MENA DELP.

Il aura pour objectif de contribuer à identifier les contraintes et de proposer des solutions pour relever les défis de l'accès aux fonds Climat par les pays du sud.

Nous nous réjouissons de votre participation active !



**Cliquez ici pour accéder au forum**

[www.oss-online.org/mena-delp](http://www.oss-online.org/mena-delp) Contact 



## Capacity building for national experts

Monitoring and evaluation is a crucial component of the MENA-DELP regional and national projects activities.

In this framework, a series of regional workshops aimed at projects managers and the MENA-DELP national beneficiary institutions were conducted to accompany countries in designing their monitoring and evaluation systems. A technical support to the projects national teams for the development of indicators calculation and dissemination tools was also provided by the Sahara and Sahel Observatory.

Different monitoring and evaluation related themes and notions were tackled :

- **Monitoring-evaluation concepts** : monitoring-evaluation models, indicators and data, result-based management, etc ...
- **Monitoring-evaluation tools** : Geographic Information System, remote-sensing
- **GEF tools** : tracking tools and Risk Assessment
- **Mapping and Collect Earth Tool** (FAO)



1<sup>st</sup> regional training and exchange workshop on M&E (Tunisia) – October 2014



4th regional training workshop on geospatial tools and services for M&E : GIS, Remote sensing, Geoportal & Collect Earth, October 2016



Training on GEF Tracking Tools and Risk Assessment, Dakar (Senegal) – November 2015







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
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