







System-based Options by Context



A tool for better investment decisions in agriculture and rural development

## **GIZ-funded Project on**

"Impact Evaluation of SLM Options to Achieve Land Degradation Neutrality"

# Final Workshop

## Sustainable Land Management to Achieving Land Degradation Neutrality:

# **Options-by-Context Approach and Tool**

## Hotel Belvédère, Tunis, Tunisia, 24 October 2017

#### Organizers

- International Center for Agricultural Research in Dry Areas (ICARDA)
- The Research Group on Hydrology Water and Soil Conservation at the Institut National de la Recherche en Génie Rural, Eaux et Forêts (INRGREF), Tunisia
- Laboratoire d'Erémologie et de LCD, Institut des Régions Arides Medeni (IRA), Médenine
- Information Management and Mine Action Program (iMMAP)

#### Participants

Staff of Tunisian National Agricultural Research Systems (NARS), Governmental Agencies and international scientists in land/soil and water management (about 20 participants)

#### Facilitators and Speakers

- Professor Hamadi Habaieb, DG, Institut National de la Recherche en Génie Rural, Eaux et Forêts (INRGREF)
- Dr. Quang Bao Le, Senior Agricultural and Livelihood Systems Expert, ICARDA (<u>q.le@cgiar.org</u>)
- Dr. Taoufik Hermassi, Senior Water-Soil Conservation Expert, INRGREF (<u>taoufikhermassi77@gmail.com</u>)
- Dr. Mohamed Ouessar, Institut des Régions Arides (IRA)
- Dr. Claudio Zucca, Senior Soil Conservation and Land Management Specialist, ICARDA (<u>C.Zucca@cgiar.org</u>)
- Dr. Badabate Diwediga, Geo-informatics and Multi-functional Landscape Ecology, iMMAP (<u>bdiwediga@immap.org</u>)
- Ms. Fajr Fradi, Dryland Resources Management, Project Officer, c/o ICARDA (fajr.fadi@cgmel.org)

#### **Contact persons**

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- Organizational details: Ms. Fajr Fradi (<u>fajr.fadi@cgmel.org</u>)







#### The project background

Land Degradation Neutrality (LDN), defined as the use of land resources while maintaining their healthy and productive states so that there is no net land degradation, is critical for the achievement of the Sustainable Development Goals by 2020. The high contextual diversity in drylands does not favour the design and application of "uniform blanket" policies. Therefore, Sustainable Land Management (SLM) options that fit specific social and ecological contexts are required to achieve LDN over large scales where significant impact can be expected.

Within the former CRP Dryland Systems and continued with a GIZ-funded project, ICARDA is developing the Global Geo-informatics Options by Contexts (GeOC) tool in collaboration with scientists and development partners to ensure it is relevant to the needs of multiple stakeholders in SLM. GeOC is a new web-based GIS tool that enables its users to define, monitor, assess and co-create knowledge and learning on relevant SLM options that match the social-ecological context at global, regional and national scales. The unique features of the GeOC tool are:

- It is based on a systems framework scientifically sound and able to cope with the high level of contextual diversity
- It improves linkages among different scales and kinds of data that are essential for SLM implementation, evaluation and upscaling.
- It provides multiple entry points for diverse needs and preferences of users.
- It offers user-friendly functions in multiple languages
- It offers online multi-system interoperability.
- It is developed to allow for continuous improvements and customizations.

Tunisia is selected for the first national customization and implementation of the GeOC tool. The reasons of this selection are:

- Tunisia is a dryland country facing a high risk of land degradation over more than 50% of its territory.
- The country has a strong commitment to Land and Water Conservation (LWC), with a National LWC Framework, two national LWC strategies established from 1990, and a ministry-level unit specialized in LWC.
- LWC practices implemented throughout the country over years now are in need of impact assessment to improve policies promoting SLM, and offer learning cases for international community of practices in SLM.

#### Objectives of the workshop

- To review, communicate and transfer the project outputs (data, tool and knowledge) to national stakeholders in sustainable land/soil and water management (LWC),
- To discuss strategies of effective uses of the project outputs in national LWC research and development toward achieving national Land Degradation Neutrality (LDN), and
- To identify potential topics for developing concept notes of follow-up research/development projects.



# Workshop Program

24 October 2017			
Time	Title	Facilitator/Presenter	
08.00-08.15	Registration	Fajr Fradi	
08.15 -08.30	Opening	DG of INGREF, Dr. Quang Bao Le	
08.30-08.45	SESSION 1: Project result overview	Dr. Taoufik Hermassi as session facilitator	
	Introduction of workshop agenda	Dr. Taoufik Hermassi	
08.45-09.20	<ul> <li>Overview of project results (25' presentation + 20' discussion)</li> </ul>	Dr. Quang Bao Le	
09.20-09.30	Group Photo		
09.30-09.50	Coffee/tea break		
09.50-10.20	SESSION 2: Project results in details: Improved GeOC tool and generated data	Dr. Claudio Zucca as session facilitator Dr. Badabate Diwediga	
10.00 10.50	• Improved webGIS (20 + 10)	Mo. Foir Fradi	
10.20-10.50	<ul> <li>Online form of Sustainable Land Management (SLM) option by context (20' + 10')</li> </ul>	MS. Fajr Fradi	
10.50-11:30	<ul> <li>GIS-based drivers and performance indicators of SLM: definitions, justification and calculation methods, results (25' + 15')</li> </ul>	Dr. Quang Bao Le	
11.30-12:00	<ul> <li>Standardized data of SLM options by context in Tunisia: overview (20' + 10')</li> </ul>	Dr. Badabate Diwediga	
12.00-12.30	<ul> <li>SLM options in Zaghouan: current patterns, issues on technological, economic and ecological efficiencies, adoptions and recommendations for effective out- scaling(20' + 10')</li> </ul>	Dr. Taoufik Hermassi	
12.30-13.30	Lunch		
13.30 -14:00	<ul> <li>SLM options in Medenine: current patterns, issues on technological, economic and ecological efficiencies, adoptions and recommendations for effective out- scaling(20' + 10')</li> </ul>	Dr. Mohamed Ouessar	
14:00-14:30	SESSION 3: SLM impact assessment on land	Dr. Mohamed Ouessar as	
	degradation/improvement and rain-use	session facilitators	
	efficiency		
	<ul> <li>GIS-based assessment of SLM options on net primary productivity (NPP) and rain use efficiency across geographic contexts (20' + 10')</li> </ul>	Dr. Quang Bao Le	
14.30-15.00	• GIS-based study of Badabate (20' + 10')	Dr. Badabate Diwediga	
15.00-15.20	Coffee/tea break		









15.20-15.30	SESSION 4: Strategies for effective uses of the project results, ideas for follow-up R&D projects embedded in national perspective/strategies toward achieving Land Degradation Neutrality (LDN)	Dr. Claudio Zucca/Dr. Quang Bao Le as session facilitator
15.30-16.15	Group work	
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16:15- 17:00	<ul> <li>Groups' presentations (10' x 3 + 15' discussion)</li> </ul>	
17:00-17:30	Workshop evaluation	Ms. Fajr Fradi
	<ul> <li>Handover participation certificates and</li> </ul>	Quang Bao Le/Taoufik
	closure	Hermassi