

WOAH Collaborating Centre for epidemiology, modelling and surveillance



PROVNA 2 - WORKSHOP

Satellite data: What, where, and how to use them



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PROVNA project

World Organisation for Animal Health Founded as OIE

2022-2024

Main objective: ECOREGIONS IN NORTH AFRICA

To define the "ecoregions" of the North African territory (Mauritania, Morocco, Algeria, Tunisia, Libya, and Egypt), each one characterized by distinct environmental and climatic factors.

Assumption: similar areas (in space and/or time) are subject to similar diseases (especially vector-borne diseases)



The process through which a territory is classified into similar areas according to specific **environmental and climatic factors**.

The climate and the environment strongly influence the presence and distribution of vectors responsible for significant human and animal diseases worldwide.

→ It is then useful to develop a map of similar eco-climatic regions adopting a data-driven spatial clustering approach using recent and detailed spatial data on climatic and environmental factors.



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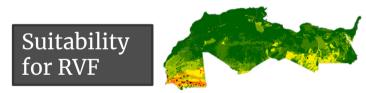


PROVNA phase 2

Given the work done, it is now crucial to combine the decisionmaking tools based on eco-regionalization with data from infield surveillance.

Ecoregions in NA





→ Essential to strengthen the capacity of the National Veterinary Authorities to effectively prevent, predict, detect and respond to diseases – with the optimisation of the available resources.



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Duration (months):

18 months

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APPENDIX 1

PROJECT PROPOSAL

Establishment of a risk-based surveillance system for Mosquito-Borne Diseases in North Africa (PROVNA2)

General Objective

To establish a <u>risk-based surveillance system</u> across the six North African countries, using the eco-regionalization method, to **monitor the emergence and spread of key animal and zoonotic diseases** transmitted by mosquitoes.

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PROVNA phase 2 6 Working Packages

Project activities will be carried out by 6 work packages (WP):

- WPo Coordination, networking, dissemination
- WP1 Gap analysis and needs assessment
- WP2 Definition of surveillance protocols
- WP3 Capacity building activities
- WP4 In-field monitoring
- WP5 Modelling

PROVNA phase 2



Three group work sessions, followed by plenary discussions, during which possible goals and targets for RFV surveillance in each country were highlighted.

Operational protocols, <u>training and laboratory needs</u> were also discussed.







12-14 Nov, 2024 - Tunis → PROVNA 2 WORKSHOP

- Proposal of surveillance protocols per country
- Discussion on training and laboratory needs

PROVNA phase 2



Laboratory support:

- Mosquito traps
- Laboratory reagents

Trainings:

- <u>Use of satellite data</u>
- GIS
- Entomology (sampling)
- Entomology (identification)
- Molecular Biology
- WGS and sequencing

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Conclusion

PROVNA2 has started, now is work in progress, providing:

- Support to the Veterinary Services in implementing and/or improving risk-based targeted surveillance of VBDs,
- In order to collect field-data and implement an innovative approach (ecoregions) to further guide surveillance strategies, optimising financial and human resources through strategic planning.

→ In line with WOAH's approach to a common regional strategy for vector-borne and transboundary animal disease control

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PROVNA phase 2

FIRST WORKSHOP:

Satellite data: What, where, and how to use them

- Satellite data for beginners
- COPERNICUS BROWSER:
 - Overview, visualise, explore, download
 - Case studies from the area
- Hands-on: exercise for the participants

The lecturers:

- → Susanna Tora, GIS analyst and Web GIS developer at the Statistical and GIS Unit of the IZS of Teramo
- → Carla Ippoliti, mathematician at the Statistical and GIS Unit of the IZS of Teramo

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TERAMO	Satellite data	PROVNA phase 2 : What, where, and how to use them	
WOAH Collaborating Centre for epidemiology, modelling and surveillance Reference Centre World Organisation for Animal Health	veillance before the workshop – LINK		
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Thank you



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