



EARTH OBSERVATION DATA USED FOR CLIMATE CHANGE ADAPTATION IN THE NORTH DOBROGEAN PLATEAU



DAKIA Association for Sustainable Development



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Purpose:

sustainable development of the society by knowledge, research, promote, use and support of the natural, cultural, technical and scientific values

First step:

taking the administration of the natural protected areas from the North Dobrogean Plateau

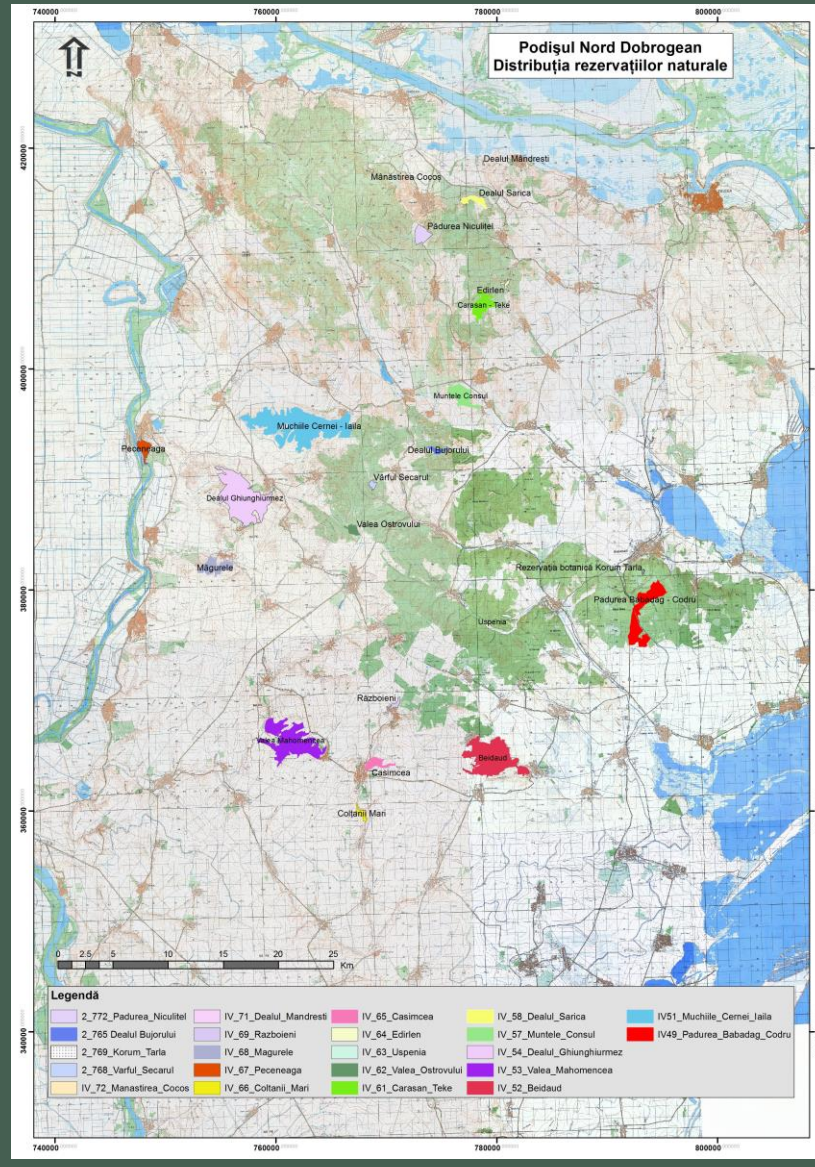
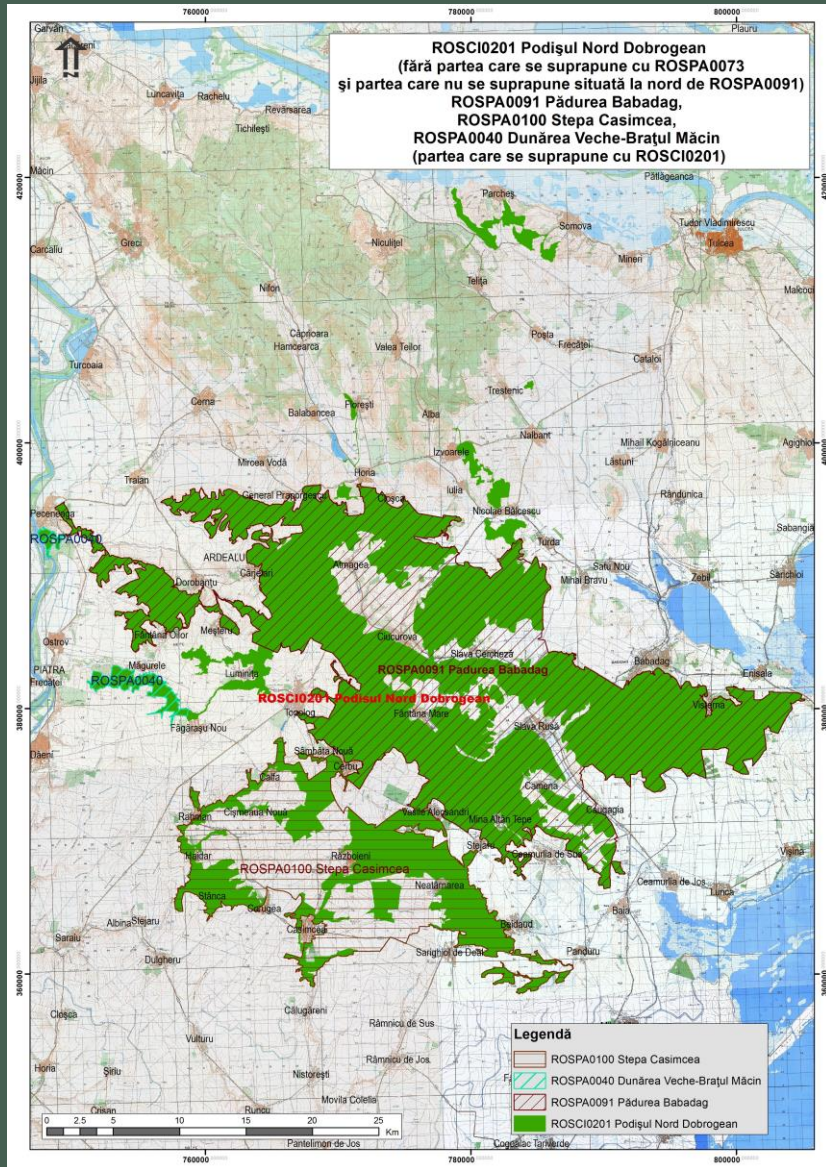
Natural protected areas from the North Dobrogean Plateau

Sites of European interest (Natura 2000 sites):

- ROSCI0201 North Dobrogean Plateau (84.875 ha) – 10 natural habitat types, 7 plant species, 5 invertebrates, 2 amphibians, 1 reptile, 22 mammals
- ROSPA0091 Babadag Forest (57.912 ha) – habitats of 63 bird species
- ROSPA0100 Casimcea Steppe (21.954 ha) – habitats of 55 bird species

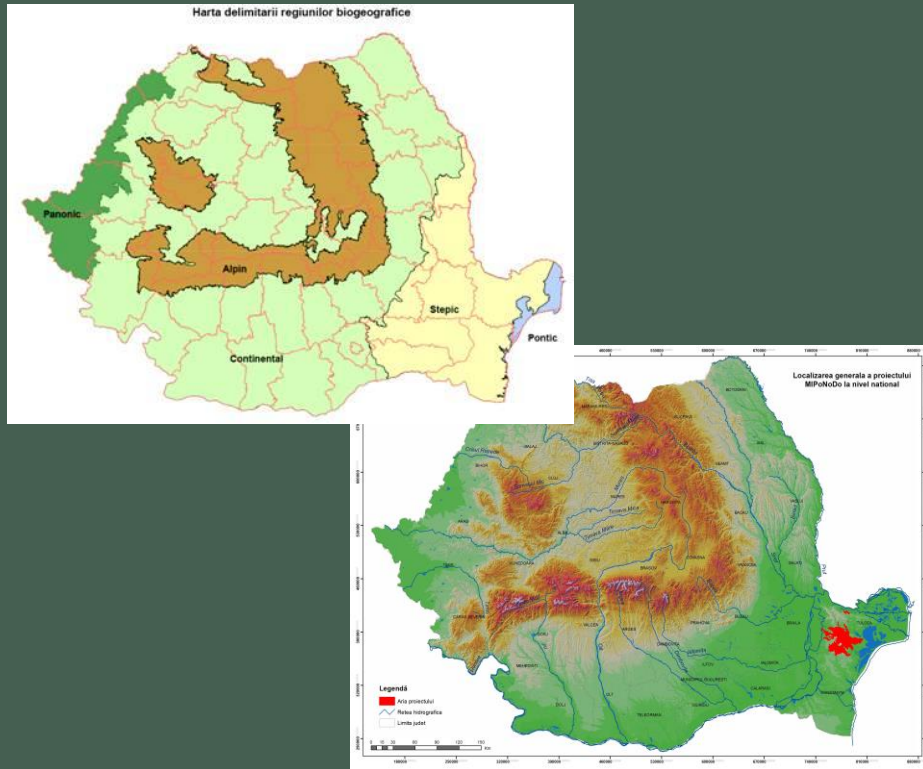
Natural protected areas of National interest:

- 22 natural reserves: IV. 49 Babadag – Codru Forest, IV.51 Muchiile Cernei – Iaila, IV.52 Beidaud, IV.53 Mahomencea Valley, IV.54 Ghiunghiurmez Hill, IV.57 Consul Mountain, IV.58 Sarica Hill, IV.61 Carasan – Teke, IV.62 Ostrovului Valley, IV.63 Uspenia, IV.64 Edirlen, IV.65 Casimcea, IV.66 Colțanii Mari, IV.67 Peceneaga, IV.68 Măgurele, IV.69 Războieni, IV.71 Mândrești Hill, IV.72 Cock Monastery, 2.765 Peony Hill, 2.768 Secarul Peak, 2.769 Korum Tarla, 2.772 Niculițel Forest



Maps of the natural protected areas from the North Dobrogean Plateau

CLIMATE CHANGE IMPACT AND ADAPTATION



The main threat: climate change – Dobrogea is the most exposed region to desertification and in the same time is the most important area from the Steppic Biogeographic Region

Adaptation: assuring that biodiversity will have the capacity to cope with the impacts of climate change.

Management objectives

- Main objective: assure a favourable conservation status for the natural habitat types and species of community and National interest that are the subject of the protected areas designation
- Secondary objectives:
 - Scientific research in order to improve the conservation;
 - Support of the local culture and traditions;
 - Sustainable development of the local communities;
 - Development of the eco-tourism;
 - Information, education, awareness on biodiversity conservation importance

Management Plan – data required

□ Structural analysis of the territory

- *Main characteristics of the abiotic and biotic environment;*
- *Characterization and mapping of the natural habitat types and habitats of the population' species of conservative interest;*
- *Socio-economic and cultural analyse of the local communities;*
- *3D Modelling and visualisation of the territory.*

□ Functional analysis of the territory

- Territorial diagnosis – ecosystem's services assessment;
- *Impact assessment of the human activities;*
- Conservation status assessment.

GIS database

- the main instrument for the analysis of the territory -

- Main resources that will be purchased:
 - Eight-Band High Resolution Satellite Imagery;
 - Digital Surface Model - MSL elevations of the reflective surfaces of trees, buildings, and other features elevated above the Bare Earth;
 - 46 Smartphones for data collection;
 - Q GIS software.
- Resources that will be developed by DAKIA:
 - Mobile app for data collection from citizens;
 - Multicriterial instrument for impact assessment.



Thanks for your attention!

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