

**Danube Academies Scientific Support to
the EUROPEAN DANUBE STRATEGY**

A BETTER ENVIRONMENT FOR A BETTER LIFE

Cristian HERA

Vice President of the Romanian Academy

TULCEA, 27 June, 2013

First Danube Academies Conference

11 September 2011, Vienna Austria

European Academy of Science and Arts - Austria, Bulgarian, Czech Republic, Moldova, Serbia, Slovakia, Slovenia Academies of Sciences, as well as Romanian Academy and Montenegro Academy of Science and Arts

Program for the Academies participation at the Four Pillars and eleven priority areas of the Danube European Union Strategy.

European Commission – Joint Research Center (JRC)
and
Second European Academies Conference (EUAC)

- November 17th, 2011, at the **5th World Science Forum, Budapest, *signed a Letter of Intent on EU Strategy for the Danube Region* by:**

Dominique RISTORI – JRC and Bulgarian Academy of Sciences, Hungarian Academy of Sciences, Romanian Academy, Slovak Academy of Sciences.
Later, letter was signed by Austrian Academy of Sciences, Bavarian Academy of Sciences, Czech Republic Academy of Sciences

- *First JRC & EUA, Conference “Science for the Danube Strategy”, Sofia, January 25th, 2012.
- *Third European Academies Conference, Smolenice, Slovakia, April, 2012.
- **FIRST JRC CONFERENCE on “Scientific Support to the Danube Strategy”, on 24th April, 2012, in Brussels, organized with participation of the Representatives from Academies, Universities & EC Officials**

4th Danube Academies Conference, Bucharest, 9 and 10th of April, 2013

- ***“Science and European Danube Strategy”***

**organized by Romanian Academy & European
Academy of Sciences and Arts,**

**with the participation of the EUDA and the
Council of Danube Cities and Regions**

***High level JRC & Slovak Government Conference
“Boosting Scientific Support to Danube Strategy”
Bratislava, May, 16th, 2013***

- **With participation of *Maros SEFCOVIC* - Vice President of EC, H.E. *Robert FICO* - Slovak Prime Minister, Ministers & Deputy Ministers from Different EU & non EU countries**
- **JRC DG *Dominique RISTORI* and DDG *Vladimir SUCHA***
- **Leading Social Innovation along the Danube**

Projects proposed by Romanian Academy:

1. Short term projects

- A. Global Change Atlas of the EU Strategy for the Danube Region – a tool for the stakeholders in the decision-making process
- B. Sturgeon conservation in the Danube River Basin – a complex environmental, social and economic approach
- Sulina Aquatic Biodiversity Station, Danube Delta
- Large participation of Romanian R&D Institutes and Universities on the BOKU Vienna Project: Danube River Research & Management (DREAM)

2. Long term projects

- International Centre for Advanced Research and Education on the River – Delta – Sea Systems: Study area: “Danube River – Danube Delta – Black Sea System”

International Centre for Advanced Research

GENERAL OBJECTIVES

The Centre will represent one of the most important **EU Research Infrastructures** in the field of Earth and Environmental Sciences, oriented towards the development of a modern and sustainable management of River – Delta - Sea systems

Pan-European point for continuous frontier research & education in the field of deltaic systems

The International Centre for Advanced Research (ICAR) will focus on fundamental and applied, integrated and multi-disciplinary research, contributing to the sustainable management of Wetlands - River – Delta – Sea areas.

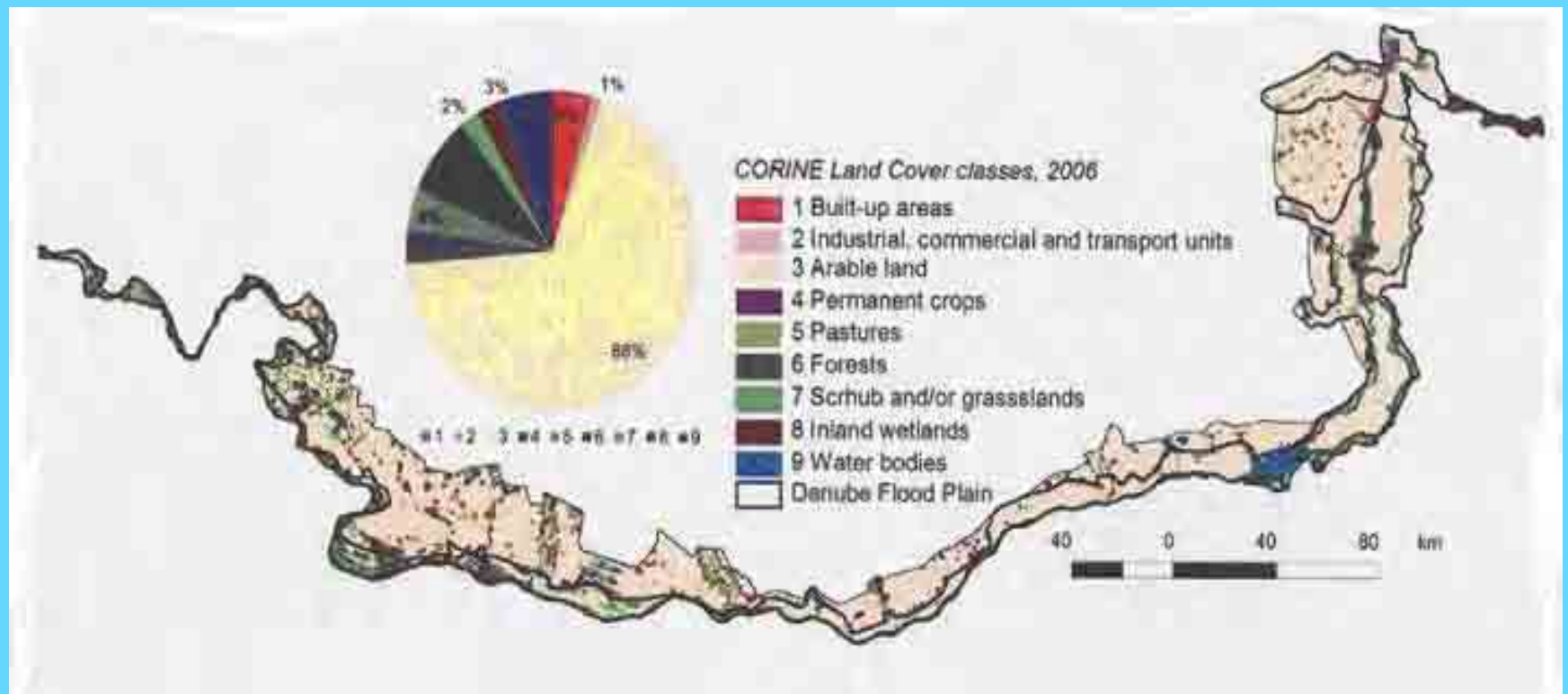
Location of the International Centre “Danube-Danube Delta-Black Sea”



Danube River a European and World natural patrimony of inestimable value

- *Cradle of European civilization*
- *Support of societal evolution*
- *Life shelter for **biodiversity***
- ***SOURCE OF WATER AND NUTRIENTS FOR AGRICULTURE*** (*Flagship clusters: Danube Water Nexus – DWN & Danube Land and Soil Nexus - DLSN*)
- *Important way for navigation and communication*

Land use in the Danube Valley in Romania



Food Security and Safety in a Better Environment, for a Better Life

- Climate change
- Soil degradation
- Water scarcity
- Biodiversity degradation
- Energy crises
 - Competition: biomass for food, fodder, fibers and “food” for cars ?
- Food crises
- *Clean environment*

Cooperation among countries in the Danube Region

Romanian sector of Danube (1)

- Imperative to maintain the ensemble of precious natural ecosystems including *Danube Delta Biosphere Reservation (4340 km²), Eco-region of planetary importance.*
- Danube length, 38 % of total (1075 km)
- Hydrographic basin area, 28,4 % of the total.
- 220 settlements: 22 cities, 198 villages

Romanian sector of Danube River (2)

- Danube River - Subject of numerous debates, studies and surveys on:
 - *the natural regime of exploiting the Danube River (Grigore Antipa)*
 - *the total embanking of Danube River, in order to promote agriculture on the areas recovered from water (G. Ionescu-Sisesti, Anghel Saligny)*
- After 70 years in the XXth century, a functional agro-ecosystem of Danube flood-plain was established for 450,000 ha, *with a vast capacity for multi crops biomass production and well preserved ecological equilibrium*
- *Damming: 432,000 ha (good & very good soil fertility)*
 - *390,000 ha with drainage and irrigation (69 % of total area), with great agricultural potential*
 - * *Crop species: cereals, oleaginous and proteic crops, industrial crops, in different crop rotation with integrated programs of crop nutrition and pest control.*

I strongly believe that together, with professionalism, respect for the nature and people, with dedicated SCIENTIFIC SUPPORT, we can contribute to PROMOTE and MAINTAIN in the future a CLEAN DANUBE ENVIRONMENT in the DANUBE REGION, to the benefit of PEOPLE and NATURE

- Looking forward to see you on October 28th, 2013, to the **SECOND DANUBE FORUM** in Bucharest.
- *Thank you for your attention!*