## Danube: Future "White Paper on Integrated Sustainable Development of the Danube River Basin"

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In the Danube River Basin (DRB), environmental challenges such as pollution, alterations of the natural cycles or invasive species are connected to economic and social inequalities leading, among other things, to a veritable brain drain of much-needed expertise. Sustainable development is key to a prosperous future of the Danube region. It can build on a diverse natural and cultural heritage, natural resources or tertiary education excellence and exert a large scale and positive impact on migration, reduce brain drain and foster environmental, economic and social justice (see *Figure 1*). Incorporating a long-term perspective is indispensable for this endeavour.

In July 2015, the Danube:Future White Paper on the future of research and education in the Danube River Basin

was published. The White Paper was prepared in a bottomup process that involved an interdisciplinary group of researchers from the majority of Danube countries.

The most promising specific avenue towards sustainability of the DRB macro region lies in the integration of cultural and natural heritage and legacy challenges by means of inter- and transdisciplinarity. To support the sustainability transition, interdisciplinary co-operation in research is required. In particular, the humanities have not been stimulated enough to bring their expertise into the needed portfolio of knowledge.

Civil society and independent media but also governments have key roles in the transformation process. University curricula and trainings based on regional strengths can support economic development and societal integration. The "White Paper on Integrated Sustainable Development of the Danube River Basin" describes key topics and principles of research and education and offers policy recommendations on national and European level. Inter- and transdisciplinary approaches combined with a long-term perspective will



Figure 1: Challenges and potentials of the Danube River Basin (Copyright: Verena Winiwarter & Gertrud Haidvogl, after Fischer-Kowalski et al. 1995)

contribute to better understanding and tackling present and future challenges. Such knowledge will illustrate the impact of past events and decisions on ecology, economy and society. The EU-Strategy for the Danube Region and the objectives of the European research agenda have been accounted for the recommendations. They encompass subregionally defined sustainability training and education, the bridging of diverse and often conflicting cultures and interand transdisciplinary investigation of biodiversity, protected areas and ecosystem services.

Horizon 2020 challenges can and should be tackled in a form adapted to the specific challenges of the macro region. All H2020 challenges exhibit emergent properties, which results in a fundamental unpredictability. Risk management involving stakeholders becomes key. Decision making under conditions of uncertainty has always been and remains a major challenge for all societies. Research has to tackle the non-linearity of complex coupled-human-ecological systems. Long-term socio-ecological research is necessary to successfully deal with the legacies and valorise heritage for sustainable development. Due to the diversity of potentials and challenges characterizing the DRB, the macro-region can become a laboratory for forward-looking, international research and education.

The White Paper is an activity of Danube:Future. This initiative aims to support the member universities of the Danube Rectors' Conference (DRC) and the Alps-Adriatic-Rectors' Conference (AARC) in their efforts to promote a sustainable knowledge society. It also seeks to connect scientific networks such as IAD with these two university networks. Danube:Future is a flagship project of EUSDR-priority area 7, Knowledge Society.

The White Paper is available for download at: http://www.danubefuture.eu/sites/default/files/Danube Future\_WhitePaper.pdf

## **References**

Winiwarter V & Haidvogl G (2015): Danube:Future White Paper on Integrated Sustainable Development of the Danube River Basin. A research communitybased White Paper on research and capacity building needs, challenges and opportunities for the development of the sustainability-oriented knowledge society of the Danube River Basin. Vienna.

Webpage Danube:Future project: www.danubefuture.eu

## Reflect the history, create the future! Enquete "Donau-Leben – Impulse für Regionen" held in the Austrian Parliament

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The President of the Austrian Federal Council, Gottfried Kneifel, invited diplomatic representatives, Members of the Parliament, experts, stake holders and decision makers of the Danube countries on November 10th to attend the Enquete "Danube Life – Impulses for Regions", convened in the Austrian House of Parliament. The Federal Council is one of the two chambers of the Austrian Parliament and represents the nine Federal countries. The event appreciated the anniversaries of 25 years of the Working Community of the Danube Countries (WCDC) and the upcoming sixty years anniversary of the International Association for Danube Research (IAD) and was organised by IAD secretariat. On behalf of IAD I would like to express our gratitude to President Kneifel for this opportunity and the recognition of the efforts for creating a common understanding within the Danube Region.

President Kneifel appreciated the long-term cooperation in the Danube Region targeted on political and scientific levels and he especially high-lighted the need for local implementation of the river basin management. WCDC representative Simon Ortner and IAD President Thomas Hein gave introducing words and provided insight to both organisations for the delegates.

The Executive Secretary of the International Commission for the Protection of the Danube River (ICPDR), Ivan Zavadsky,



Figure 1: President of the Austrian Federal Council, Gottfried Kneifel (Photo: H. Kutzenberger)

informed about mile-stones of transboundary cooperation in the Danube Region: the Danube River Basin Management Plan and the new Danube Flood Risk Management Plan. These two instruments were created by all Danube states with inputs from scientists, environmental organisations and stake holders, following EU regulations. To explain this development from the perspective of a member state, Franz Wagner from the Austrian Ministry of Agriculture, Forestry, Environment and Water Management, explained the Austrian National Water Management Plan as a tool for integrated development of catchments.